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GUIDE FOR SOCIAL STUDIES AND SCIENCE-HEALTH, FIRST YEAR.
JUNIOR HIGH SCHOOL SPECIAL CURRICULUM.
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BALTIMORE CITY PUBLIC SCHOOLS, MD.

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THIS CURRICULUM GUIDE FOR JUNIOR HIGH EDUCABLE MENTALLY HANDICAPPED STUDENTS PROVIDES INFORMATION ON TEACHING PROCEDURES, SUGGESTIONS FOR PLANNING SUPPLEMENTAL UNITS, TYPES OF LESSONS, AND EVALUATION. INDIVIDUAL UNITS INCLUDE THE INFORMATION CONTENT, SUGGESTIONS FOR BACKGROUND STUDY, SPECIFIC TEACHING PLANS, DISCUSSION QUESTIONS, ASSIGNMENTS, ACTIVITIES, AND REFERENCE AND SUPPLEMENTAL MATERIALS. UNITS PRESENTED ARE--(1) SCHOOL, CLASS, AND SUBJECT ORIENTATION, (2) MY HOME AND MY FAMILY, (3) TRANSPORTATION, (4) BALTIMORE, ITS HISTORY AND LANDMARKS, (5) GEOGRAPHY REVIEW, (6) INTRODUCTION TO OCCUPATIONAL INFORMATION, (7) LIVING THINGS, (8) UNDERSTANDING ELECTRICITY, (9) PERSONAL HYGIENE, (10) HEALTH AND SAFETY IN HOME AND COMMUNITY. (VO)

EC 000 381
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GUIDE

# SOCIAL STUDIES

## SCIENCE

## AND

## HEALTH

*First Year*

## JUNIOR HIGH SCHOOL

## *Special Curriculum*

*Baltimore City Public Schools*

*Division of Special Education*

REVISED

1964

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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# GUIDE

# FOR

# SOCIAL STUDIES

# and

# SCIENCE-HEALTH

## First Year

## JUNIOR HIGH SCHOOL SPECIAL CURRICULUM

## CLASSES

BALTIMORE CITY PUBLIC SCHOOLS
Revision 1964

## POINT OF VIEW

In 1959, the curriculum guide, SOCIAL STUDIES--SCIENCE AND HEALTH, was developed for use with first year junior high school special curriculum classes. In its new approach to the presentation of social studies to special curriculum students, it represented a fulfillment of a need that had been felt for a number of years by those teachers who were working in this curricular area.

During the five years that the Guide has been used, instruction in social studies has been improved and enriched. The valuable experiences that teachers have had in using the bulletin have resulted in changes in organization and content. Although many of the materials which were part of the 1959 edition have been retained in the present bulletin, many new materials have been added.

Teachers of social studies--science and health are urged to read the Guide carefully and to take constructive steps to implement the bulletin in light of their individual teaching situations.

The Secondary, Vocational, and Adult Education Division is appreciative of the splendid work done by the staff members who have given their time, advice, encouragement, and support to make this publication possible.

Vernon S. Vavrina
Assistant Superintendent

## FOREWORD

This Guide has been developed in order that Special Curriculum pupils may add to their knowledge and understanding of the world in which they live. It is expected that teachers will adapt the suggested learning experiences to meet the needs of the community and its changing pupil population.

There is no single approach to the learning needs of pupils. Neighborhoods vary; home backgrounds are different; the pupils and faculties of each school have certain differences, both individually and collectively. This Guide should, therefore, be applied with flexibility so that the demands of individual differences may be met.

The activities suggested in this Guide are basic to a good educational experience for all children. By their inclusion, it is expected that the Special Curriculum program will maintain stability.

As with all Guides and all good programs, it is expected that additions and deletions will be made as result of periodic re-evaluation of our attempts toward an effective educational experience for the Special Curriculum pupil.

Harrie M. Selznick
Director of Special Education

# LETTER OF TRANSMITTAL

# AND

# ACKNOWLEDGMENTS

This guide in Social Studies, Science and Health, for the first year Special Curriculum, is offered to assist you in planning a well-balanced program of instruction in these areas. The units have been selected on the basis of value and and interest to retarded pupils. They provide for organized experiences and integration of basic concepts in these three subject matter areas.

The content is the outgrowth of exploratory work done by committees and individuals. Appreciation is extended to all who contributed to this publication. Special acknowledgments are extended to these teachers for their contributions in specific areas: Mrs. Louise Turks, teacher-pupil planning; Mr. Raymond Kelly, transportation; Mr. Christian Kolom, weather; and Mr. Lynn Jones, Baltimore.

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## INTRODUCTORY STATEMENT

The Social Studies and Science-Health areas for Junior High School Special Curriculum include geography, history, civics, science, safety, health and occupational information. To be of greatest value to the pupils, the program must take into account the following facts:

That the primary diagnosis for these pupils, is one of mental retardation.

That all pupils have been exposed to social studies either in the regular grades or in special classes, from six to nine years.

That all pupils are from three or more grades educationally retarded.

That for the majority of these pupils Junior High School Special Curriculum represents terminal education.

Examination of these facts in terms of the offerings in the social studies area will lead us to the following conclusions:

The offerings must be such that they will have <u>real life value</u> and meaning for these adolescent boys and girls.

The texts and assignments must be in accord with the general educational and mental levels of the group.

The offerings must point primarily toward home and family living; social adequacy; civic responsibilities; and occupational information.

The main forces which affect curriculum content and method at the Junior High Special Curriculum level are:

The present and ultimate needs of the pupils
The characteristics of the pupils
The ability levels of the pupils
Social realities
Value placed upon the democratic way of life
The rapid advances in science and technology

The needs of the pupils are appraised in part by these facts:

Junior High Special Curriculum represents terminal education for the majority
The age range of pupils (13.8-21)
The majority seek employment upon leaving school
The majority marry at an early age

An examination of these four facts indicates that the needs of these pupils are best served if preparation for home and family living, citizenship, and employment are our points of emphases.

The characteristics and problems of the mentally retarded adolescent will affect the teacher's planning, selection of instructional materials, and classroom teaching. The boys and girls who are referred to the Junior High School Special Curriculum classes have special needs which call for special treatment.

Mental retardation denotes arrested or incomplete development rather than deterioration. It is basically a physical or constitutional defect. The chief differences which you will note will probably be in reaction time to given stimuli. The mentally retarded child will be slow to respond and slow to learn. He often lacks sufficient drive and will find long assignments irksome. He may show little ambition and evince very meager associative, adaptive, evaluative and organizing powers. He has a limited attention span and finds it difficult and at times impossible to attend to tasks, directions or conversation of long duration.

Since his overall limitation appears to stem from less than normal intelligence he lacks the ability to generalize or draw upon past experiences to solve immediate problems. He also finds it difficult to work with abstractions and may be incapable of logical thought.

His personality deviations are as manifold as those of any group. He is not necessarily defective in emotion or instinct, however, since he can seldom discern the finer differences in various situations he is easily offended, frustrated, and is prone to over-aggressiveness or over-docility. In many ways, however, he does reflect the stability of his environment.

Physically he is more prone to illness and physical defects than the normal child and may lack the physical stamina usually associated with children of his age group.

The mentally retarded pupils ability to adjust will be greatly influenced by his personality. If he is emotionally unstable his chances of making a satisfactory school adjustment are greatly limited.

He is of course limited in his choice of a vocation, although the mentally retarded adolescent who is emotionally stable and has a high degree of social competency will have a much better chance in the world of work. Therefore the school must accept, as part and parcel of its obligation to these children, the need for attention to emotional and social needs as well as to academic and vocational needs.

The teacher must know her pupils and in really knowing them her expectations as to their behavior, adjustment and progress will be realistic, and it is hoped attainable.

These pupils will range in intelligence from those with I.Q.'s of 55 to those with I.Q.'s of 79 or 80. In ability to read the range will be from a pre-primer level to a fifth or sixth grade level.

Since the Junior High School Special Curriculum will be terminal for the majority of the pupils, attention must be given to the areas of occupational information and guidance and to possible job placement. The field of social studies plays a very important role in this area. The good teacher will say first of all -"This is a child-more like than unlike other children. This child because of certain limitations needs special help if he is to make the most of his potential. I, as his teacher, will not sell him short. I will learn as much about him as I can and in knowing him I will be able to help him."

We must consider social realities in planning the Social Studies program for these pupils. Employment is competitive, therefore, these pupils must be helped to compete in the labor market with those for more able. Economic competence is usually a requisite for social and emotional adjustment; therefore, they must be helped to make the most of their capacities, however meager, and make their contributions within the border lines of reality. Also, they will be expected to keep within the law, function as citizens, and maintain a home and family. These facts then are the real foundations upon which the curriculum in Social Studies must be built at this level.

These pupils as adults will be voting, tax paying citizens, and will play their part in forming the over-all social structure in our democracy. It is imperative that the school through the Social Studies program provides for direct learning in this area. These pupils must get an understanding, appreciation and love of country; a working knowledge of the duties and responsibilities of a citizen; practice in democratic and cooperative action; and first hand experiences with people and things which make up their communities.

Since space missiles, rockets, jets and atomic powered submarines have become realities, we must accept the responsibility for giving even the mentally retarded some information and understanding of space age development. These pupils must get some basic understandings of the universe; some knowledge of the discoveries in science and technology which will exert increasing impact upon our way of life; some understanding of the possible benefits and dangers of these discoveries; and, some perspective regarding the changed patterns of living which will result from man's rapid advances in science and technology.

## BELIEFS

(Compiled by Professional Development Workshop #522)

We believe that the Social Studies, Science-Health Program for these pupils should contribute toward:

Developing Self-Realization

Providing opportunities which will help the pupil identify and develop his abilities and interests

Helping him discover that he is an important member of society and as such has a contribution to make

Providing opportunities for cooperative action

Developing Effective Human Relationships

Leading the pupils to understand the similarities among peoples

Providing opportunities for pupils to meet and work with pupils from schools other than their own

Promoting an understanding of the inter-dependence of man

Studying the great works of men and women of all races, creeds, and national origins

Providing opportunities for group cooperation within the class, the school and the community

Developing the ability to plan and execute social activities which will foster good relationships in the home, school and community

Developing Economic Efficiency

Providing detailed information and instruction in the area of occupational information which will aid in self-evaluation in reference to job holding

(Inculcating desirable attitudes toward all honest work)

Studying the contributions to daily living of work at all levels

Increasing Knowledge and Skill

Offering a program of instruction which is geared to the abilities and interests of the pupils served

Providing harmonious, enjoyable opportunities for worth-while experiences as expressed (in part) by the interests of the pupils

Planning for the use of all media known to be valuable in teaching in the area

Developing Acceptable Attitudes

Presenting all materials without bias

Offering opportunities for critical evaluation of material

Providing situations which lead to discussion and practice of desirable attitudes

Fostering a climate in the classroom which will engender those attitudes which are held to be worthwhile in a democracy

Giving the pupils opportunities to plan, with the teacher, units of instruction which point up acceptable attitudes toward people, places, governments, work, and home and family living

Developing Civic Responsibility

Presenting subject matter which will give a background for understanding and appreciating the responsibilities and privileges of the citizen

Providing opportunities for civic service in the classroom, the school and the community

Developing an understanding and appreciation of the Democratic Way of Life

Offering in the curriculum a thorough study of American History with emphasis placed upon:

Ideals upon which our nation is founded
The sacrifice of millions who make our nation endure
The lives of the men and women, great and small, living and dead, who worked to bring about a nation "founded in liberty"

The structure of American government

Insuring a democratic atmosphere within the classroom and the school

Developing an understanding of the Importance of Good Health

Helping pupils to understand how the body works and the need to keep it in good working order

Helping pupils to understand how the body is nourished and to identify the foods which yield the necessary nutrients

Developing understanding of the role of the community in providing facilities for prevention, control, and treatment of communicable diseases and mental health

Teaching pupils the value of community health services and how to secure them

Developing some understanding of Science and How it Affects Man's Life.

Helping pupils to understand the nature of living things and the need for preservation of some species and the need to protect ourselves from others

Helping pupils understand changes in the earth's atmosphere in order to make necessary adjustments to climate and weather

Helping pupils to understand the forces of nature that produce the energy, sound, light and electricity essential for communication, transportation, and industry.

Promoting Safety

Developing an attitude of respect for laws regulating safety in school and community

Developing an appreciation of the role of the community in providing agencies to control garbage and trash disposal, water and air pollution, building codes, street lighting, maintenance of streets and highways, and fire hazards

Helping pupils to understand the dangers of fire, gas and electricity in order to make living safer in home, school and community

## SUGGESTED PROCEDURES FOR TEACHING SOCIAL STUDIES

## (JUNIOR HIGH SPECIAL CURRICULUM)

BEFORE starting a new unit the following steps should be taken:

Read the entire unit and take note of the parts you wish to expand.

Collect pictures and other aids related to unit.

Check texts and supplementary reading material for content related to unit.

### LESSON 1

Introduce the new unit through discussion of pictures, objects filmstrips or bulletin board. Speakers may sometimes be used.

Introduce some of the specific vocabulary through your discussion, and list on the board.

Add to this vocabulary list in subsequent lessons. Try to present words in context whenever possible. The vocabulary list will be transferred from the board to a chart and will be used frequently. Since the vocabulary list should become a part of the pupils speaking-meaning vocabulary, the following are suggestions for developing and maintaining meaning of words on the list as you proceed through the unit.

Matching

word with meaning
meaning with word
pictures with word
word with pictures

Filling blanks with proper words

Finding sentences in content which contain words

True-False sentences containing meaning of words

Writing own sentences using words. (advanced groups)

Acting out action words

Explore pupils' knowledge concerning the unit and list pertinent statements on the board under "What We Know."

Discuss unit with class in terms of any questions they may have and list on board under "What We Would Like To Find Out." Use pictures or other aids to stimulate the class.

Have these read by class and have them decide which question should be studied first, second, third, etc.

Discuss sources to be used in getting answers.

Review vocabulary and main points discussed as a summary.

Have pupils copy words and questions in note books.

LESSON II

Recall previous lesson and review vocabulary chart. (See Suggestions in Lesson I))

Present content which will help in answering first "What We Want to find out" question..

Content can be presented in one of a number of ways

Paragraphs on board

Paragraphs (ditto sheets)

Material from text - magazine, etc.

Paragraphs developed through "Experience Chart Methods". (See Special Curriculum -Language Arts Guide -Revised Edition)

Add specific vocabulary, found in content, to vocabulary chart.

Provide for a check on comprehension after study of content.

Have pupils summarize-

For advanced classes have pupils outline in notebooks content presented. Teacher may need to have entire class participate and write outline on board until pupils understand simple outlines.

LESSON III

Recall previous learnings.

Check understanding of specific vocabulary.

Present content (see Lesson II)

Introduce pupils to a continuing type of activity related to the unit.

Scrap book

Picture Dictionary

Magazine cut-outs, with pupil writing caption or a paragraph,etc.

Pupils may be allowed to work on projects whenever teacher feels that such work is appropriate.

Office Staff-Junior High
February 1964

Note

The Section, "Suggested Procedures" has been organized into three lessons, however, with pupils of very low ability these same procedures may require more than three lessons.

## Helps for the Teacher in Planning Supplementary Units

I. Simple steps in planning a unit

A. Select a topic which is appropriate for the interest, ability, and ages of the pupils.

B. Collect instructional materials to be used for:

1. Teacher reference

2. Pupil reference

3. Visual Aids

C. Explore school and community resources which could be used in teaching the unit.

D. Set up basic generalizations and understandings to be developed.

E. Make a detailed outline of content to be covered.

F. List specific vocabulary to be introduced.

G. List activities for pupils which may be used in connectiin with the teaching of the unit.

H. Select appropriate ways of initiating the unit.

1. Bulletin board displays

2. Pupil experiences

3. Pictures, films, filmstrips and recordings

4. Stories

5. Discussions

6. Field Trips

7. Objects

8. Audio-visual aids

II. Teaching the unit

A. Introduce the unit to the class.

B. Encourage pupils to ask questions and set problems which will relate to unit:

1. Supplement pupils' questions and problems

C. Plan a variety of lessons following outline of content which will enable pupils to answer their questions and solve their problems.

(See pages 20-24 -"Types of Lessons")

D. Have pupils summarize their learnings.

E. Use of bulletin boards, slides, scrapbooks, posters, art work, dramatization, and simple reports are suggested as interesting activities for the culmination of the unit.

III. Evaluating the Unit

A. Give a written or oral check

B. Have pupils answer these questions:

1. Are we able to answer the questions we listed at the beginning of the unit?

2. How did we find the answers?

3. Why was this topic a good one to study?

4. What did we like best about the topic?

## EFFECTIVE PLANNING ACTIVITIES

There are very few teachers, who do not make provisions for some group planning activities. However, the following records of classroom experiences may suggest further possibilities for extending this program, thus making shared planning a dominant note in the life of the classroom. This suggested program of action will provide an effective tool for classroom teachers to use as a daily, weekly, or monthly guide.

To make permanent records of these planning activities, primary chart paper may be used. The chart may be displayed in a prominent place in the classroom making it easy for referral. This is an excellent technique for evaluation purposes for teacher and pupils.

Through skillful questioning and discussion the teacher may lead the pupils to develop a program similar to the following:

OUR SEMESTRR PLAN
or
OUR SEMESTER GOALS

1. Select units on topics of interest
2. Study weather conditions
3. Keep informed concerning "Space" activities
4. Have news reports
5. Bring in interesting objects, items, etc.
6. Set up an aquarium
7. Have a Science Corner
8. Decorate bulletins
9. Have art work based on class activities
10. Take trips
11. See films and television programs
12. Learn to use reference books
13. Report on lives of interesting people
14. Study about holidays and special days
15. Work with school projects (Red Cross, Goodwill Drives, etc.)
16. Plan parties
17. Have plays
18. Keep records of our activities
19. Select special helpers
20. Do simple experiments
21. Practice good school citizenship

## OUR MONTHLY PLAN

### FEBRUARY

1. Practice habits of good citizenship

   (a) in the classroom
   (b) in the cafeteria
   (c) in the halls
   (d) in assemblies
   (e) in the community

2. Select class helpers (books, plants, etc.)

3. Report on weather conditions

4. Make special room decorations

5. Select a committee to set up an aquarium

6. Plan a unit on "Brotherhood"

7. Study famous people born in February

   George Washington
   Abraham Lincoln
   Frederick Douglass
   Thomas Edison

8. Draw pictures of famous people of February

9. Show films related to our unit

10. Watch television listings for special science programs

11. Make scrapbooks of our work

12. Plan a summary of our unit

At the end of the month, check items completed for activities to be carried over to the next month. Include in next month's plans any items of interest which might have developed as an outgrowth of February's plans.

## OUR MONTHLY PLAN

### MARCH

1. Be good citizens
   - (a) Keep out of trouble during spring vacation
   - (b) Practice habits of neatness and cleanliness
2. Have news and weather reports
3. Change our bulletins and room decorations
4. Make a chart of signs of spring
5. Study famous people born in March
   - St. Patrick
   - Andrew Jackson
6. Plan a unit on "Baltimore, of Yesterday and Today"
7. See films and filmstrips of Baltimore
8. Plan a bus trip to see interesting things in Baltimore
9. Plan group summaries
10. Draw pictures and make booklets on our work
11. Check over our notebooks

'. These plans are based on social studies, science and health activities.

'. Similar plans may be developed for each month of the school year.

## Types of Lessons

The experienced teacher is able to teach in a variety of ways. She knows that teaching day after day using the same general method can be boring to the pupils and to herself. As a refresher for the experienced teacher and as a definite help for the new and beginning teacher, there are listed below, ten types of lessons which are used in effective teaching. The majority of lessons that are taught will usually be a combination of two or more types.

1. Orientation - background - introduction - initiation

   All of the above terms mean approximately the same. This type of lesson is used at the beginning of a unit or at the beginning of a new topic within the unit and briefly at the beginning of many lessons. This type of lesson gives the teahher an opportunity to develop pupil interest in the topic, provide background information and material, explore pupils' knowledge, introduce specific vocabulary, secure pupil questions and problems for further study, and make use of maps, globes, pictures, charts, etc. as aids to heighten interest and understanding.

2. Developmental

   The developmental lesson is one in which the teacher seeks to bring understanding to her pupils by leading them to the satisfactory explanation of a problem. She may start with a definite premise or generalization and have them explore facts and knowledge which bear out the generalization. On the other hand, she may have pupils read and discuss certain facts and information and have them discover that they have arrived at a basic concept or generalization.

To put the above in a different way, let us say that the teacher goes from the general to the specific or from the specific to the general. It has been said that developmental teaching is teaching in its highest form.

3. Teacher-directed study and/or practice or Teacher-supervised study and/or practice

This type of lesson lends itself well to both new material and to material which has been discussed or presented in a previous lesson. In a lesson of this type, the teacher is a source of reference and help. Good habits of work and study, the ability to understand and carry out assignments with a minimum help, use of the dictionary and encyclopedia, use of supplementary texts and work on individual assignments for the more advanced pupils, are all a part of a lesson of this type. Needless to say, the lesson must have purpose and be a sequential part of the unit being studied.

4. Independent study and practice

In this type of lesson, the subject matter and assignments must be thoroughly understood by the group, as they must work independently. The teacher will, in all probability, be working with another group. This type of lesson lends itself well to written checks on comprehension, review and practice of skills.

5. Oral discussion-socialized recitation

This type of lesson will be used in connection with many other types of lessons, however, an entire lesson of this type must be planned for as carefully as any other type of lesson. In its best use, the pupils carry on a discussion among themselves, a chairman, group leader, or moderator taking charge. The teacher acts as a guide and helps to steer the discussion toward

definite learnings. The materials best suited for this type of lesson is material that has been studied, problems which need to be worked out and controversial issues to be discussed, etc. This type of lesson can constitute a good review.

6. Drill

The drill lesson may not be used as frequently in the social studies areas as in the area of arithmetic or spelling. However, there are times when drill is not only needed in social studies, but can be fun and make learning easier. In map work, drills can be given on direction, location and recognition of land and water forms, cities, states, countries, nations, etc. Drill should move along at a fairly rapid pace. The time devoted to drills should be short, and the periods frequent.

7. The Review Lesson

From time to time, a review of material studied is necessary in order to assess pupil growth and to ascertain next steps. The review lesson will usually come at a logical place in the sequence of the unit or topic and, of course, at the end. The review lesson can be either written or oral, or a combination of both. The pupils may work independently or under the direction of the teacher.

8. The Appreciation Lesson

Appreciation for the contributions and cultures or other countries and peoples should be an integral part of all teaching. From time to time, a teacher may wish to devote an entire lesson to the appreciation of painting, music, sculpture or inventions, etc. of a certain country. When this is the sole purpose, then the lesson may well be considered an appreciation lesson. An appreciation

lesson should develop an understanding of the people and country making the contribution as well as an understanding of the contribution itself. To make such a lesson worthwhile, the teacher should have a store of background information concerning the subject being introduced and should provide acceptable audio-visual material.

9. The Audio-Visual Lesson

Audio-Visual aids will be used in lessons of all types, however, there are times when an entire lesson will be devoted to films, filmstrips, pictures, objects or T. V. programs. Plan carefully for this type of lesson. All films and filmstrips should be previewed by the teacher before use with pupils. Be sure that the aid suits the immediate situation, and before and after viewing, discuss and tie-in the aid with the subject matter being studied. For slower children, it is often wise to list on the board the parts to be emphasized. If necessary the aid may be used a second time to insure better understanding and clear up any specific points.

10. Culmination Lesson

Just as a unit is initiated or introduced, so it must be culminated. The culmination lesson at its best, represents the main learnings of the unit as shown by the class in the form of rpports, pictures, dramatics, panel discussions, quizzes, newspapers, parties, etc. The main criterion being "Does the culmination lesson presented by the pupils, show that learning and desirable habits and attitudes have been forwarded?" By and large, the culmination lesson should not involve lengthy preparation nor should it attempt an elaborate display. It should be a natural

outgrowth of the work carried on during the unit and should represent a summing up of what has been learned. When the help of other departments such as music, art or physical education is needed, a real opportunity for good correlation is presented.

## Evaluation

In evaluating a pupil's progress in Social Studies, Science and Health the teacher will probably wish to assess his growth in two major areas, knowledge and skills and habits and attitudes. The first area will lend itself to a more objective evaluation than the second. The teacher will be able to check regularly and frequently on the pupil's knowledge and understanding of what is being studied and on his skill in using a variety of materials of instruction. In the area of habits and attitudes, the teacher must rely mainly upon his own observation of the pupil as he works and plays with his classmates. (The pupil should have shown improvement in his relationships with others in his attitudes toward school and work.) Anecdotal records will prove of great help to the teacher in studying, helping, and evaluating a pupil in this area. Some of the pupils will make very noticeable gains in all of the areas listed above and some will show slight but satisfactory gains.

At the end of the first year in Special Curriculum the pupil should have a better knowledge and understanding of the following:

1. The privileges and responsibilities of family, school and community living
2. The privileges and responsibilities of living in a democracy
3. The basic rules for healthful living
4. The care of food, clothing and the home
5. Wise consumer buying
6. Care of the body
7. Health and Safety
8. Baltimore City since its founding
9. Baltimore City's part in national events

10. The educational, religious, recreational, cultural and vocational opportunities offered in Baltimore City

11. How and where to look for suitable employment

12. Use of maps, globes, and charts

13. Facts about air, water, soil, plants, animals, energy, magnets, climate, reptiles, etc.

14. Transportation's role in everyday living

15. Holidays and special days

16. Current events

# CURRENT EVENTS
## ( 1st., 2nd., and 3rd. year)

Current events constitute an important part of any social studies program. Especially is this true when the program represents terminal education for the retarded adolescent. Quite often their opinions and attitudes toward local,national, and inter-national happenings are either non-existent or exist only in terms of matters which have closely affected their families.

The problem facing the school is to create an interest in current happenings, which will lead the pupils to read sections of the newspaper in addition to those devoted to sports and comics; listen to programs on radio in addition to those of mystery and the old west and look at television programs in addition to those concerned with murder, the winning of prizes and cartoons. The school must seek to have the boy and girl aware that there are at least two sides to most issues and that they must try to think about all they read, hear and see and then form opinions. Easy? No! Worth attempting even with slow pupils? Yes!

Time can be taken from the regular social studies lesson to discuss important or unusual news, however, the best method of getting pupil participation is to set a period aside each week for current events. A box marked Current Events may be kept in the classroom. Pupils drop initialed clippings from newspapers, newspapers, magazines, etc. into this box during the week. The teacher will screen all clippings as to importance and suitability prior to the social studies lesson. (This offers the opportunity to cut down on the number of fires and murders and accidents which usually appear.) The teacher may then list on the board Local, National, International, Human Interest,, Sports etc. and as pupils read and discuss clippings they are encouraged to write the title or caption of their clippings under the proper heading.

A number of graded periodicals are available in the schools for use in current events.

SCHOOL, CLASS AND SUBJECT ORIENTATION

I. Understandings

A. Schools are named for persons who have been worthy citizens; students may well follow the example they have set.

B. School is "your home away from home"; therefore, it deserves the same care and respect you accord your home.

C. All persons who live and work together in school make up your school family. Each does something to contribute to your well-being and your preparation for adult life.

D. School equipment and supplies are purchased from the taxes your parents pay. It is to your advantage to exercise care in using them.

E. The good school citizen does his best each day, lives peaceably with his schoolmates and takes his problems to the proper authority.

II. Motivation

A. Survey of schools from which pupils have come.

Discuss same in terms of name, locality, personal reaction to and reason for same

B. Show pictures or slides of activities of school in previous years

Pupils need guidance in the development of proper attitudes toward the school, its personnel, and its program. Toward this end, it is suggested that teachers present the following information following unit procedures. The nature of the content requires each teacher to compile his own.

Research origin of name of school.
Report on community in which school is located
Make a map of the school community.

The School

-its history, name, number, etc.

-its location

-its organization

-its routines, fire and air raid drill

-its facilties, library, gymnasium, cafeteria, lavatories, exits, etc.

-personnel, -principal, vice-principal, special assistants, unit head, department head, doctor, nurse, home visitor, school social worker, counseler, custodial staff

Tour the building.
Draw floor plan.

Display pictures of building personnel
or
Use silhouettes on bulletin board with appropriate titles.

The Class

-meeting classmates

-setting up rules and regulations for living together

-discussing care of room, equipment, texts and supplies

Citizenship in the School

-the right school spirit

-scale for self-evaluation

-correction of work habits

-school report card

-value of a good school record

Orientation

Social Studies -geography

history

civics

science

occupational information

health and safety

Tell or read stories of people with desirable and undesirable character traits. Discuss-role play

Have pupils print, stencil or spray-paint signs relative to "Rules for Success in School" -Audio-Visual Aids

"How Friendly Are You?" Sd. 499.1

"How Honest Are You?" Sd 270.2

Developing Friendship Sd 372.1

The Gossip -Sd 737.1

Improve Your Personality- Sd 436.1

The Outsider Sd 455.1

| | WHAT KIND OF PERSON ARE YOU? |
|---|---|
| MANNERS | Rude, noisy, annoys others.<br>Pushes past and in front of others.<br>Speaks while others are speaking.<br>Listens when others are speaking.<br>Lets others pass first.<br>Is quiet, polite, and pleasant. |
| DISPOSITION | Hard to get along with, loses temper.<br>Gets angry and sulks, wants own way.<br>Quarrels with schoolmates, over trifles.<br>Is agreeable most of time.<br>Cheerful and always keeps temper. |
| HEALTH HABITS | Face and hands dirty; clothes, untidy.<br>Careless in care of body and clothes.<br>Doesn't like to exercise or keep clean.<br>Takes exercise and keeps clean.<br>Keeps body and clothing clean. |
| WORK HABITS | Lazy, gets out of work whenever possible.<br>Doesn't like to work. Complains.<br>Works only when teachers are watching.<br>Does work assigned willingly.<br>Finds work whether assigned or not.<br>Slovenly in work, anything will do.<br>Neglects and slights work.<br>Careful that work is correct.<br>Always prompt to repeat until work is done in best possible way. |

UNIT: MY HOME AND MY FAMILY

I. Understandings

A. Mutual love and respect are essential for good family relationships.

B. Accepting responsibility is necessary for family living.

C. Understanding the rights and responsibilities of each member of the family helps in maintaining a good family unit.

D. Learning how to cook, sew, and clean is important to good family living.

E. Learning how to care for young children, the aged and the ill promotes better family life.

II. Suggested Activities

A. Make a chart showing the major responsibilities of various members of your family.

Example: (Use magazine pictures to illustrate below)

| FATHER | MOTHER | MYSELF(BOY OR GIRL) Age 13 CHECK | SISTER |
|---|---|---|---|
| Works to support family.<br>Repairs various articles in house<br>Paints and repairs house or apartment<br>Trains and disciplines children | Cooks, cleans, sews and repairs clothing<br>Works part-time to help support family<br>Cares for children<br>Trains and disciplines children | Cuts grass and helps father make repairs around house or apartment<br>Dries dishes<br>Runs errands<br>Sews, baby-sits, cleans house | Helps with cooking, cleaning, and sewing<br>Makes beds and washes dishes<br>Baby-sits or helps with younger brothers and sisters |

.Make a scrapbook of simple menus for breakfast, lunch, and dinner.

.Make a scrapbook of cleaning devices used in the home, and tell how each is used and cared for. Illustrate with pictures from old magazines or draw illustrations.

Plan a bulletin board showing various home duties.

III. Audio-Visual Aids

| | |
|---|---|
| Clothes and You Line and Proportion | Sd-686.1 |
| Caring for Wool | Fs-1450 |
| A Date with Your Family | Sd-421.1 |
| Health Protection Through Cleanliness in the Home | Fs-441 |
| Making Your House Livable | Fs-1298 |
| Personal Appearance | Fs-1699 |
| Planning Meals for Nutrition | Fs-1261 |
| Table Manners | Fs-1702 |
| Essentials of Diet | Fs-294 |
| Your Job As Big Brother or Sister | Fs-1295 |
| Your New Home and How to Take Care of It | Fs-1152 |
| The House I Live In | Sd-111.4 |
| (Housing) The Baltimore Plan | Sd-290.2 |
| Homes in the City | Fs-579 |

IV. Suggested References


T-Duvall, Evelyn M., Family Living Macmillan Co., 1955
T-Hatcher; Andrews Adventures in Home Living Bk. 1 -1959 D.C.Heath
T-Hovey; Reynolds Practical Book of Food Shopping J.B. Lippincott
T-Jones, E.G.;Burnham,H.A. Junior Homemaker J.B. Lippincott
T-McDermott;Nicholas -Homemaking for Teenagers 1955
Charles Bennett Co.

T-Roanoke Public Schools Family Life Education Resource Guide: American Social Hygiene Association, 1790 Broadway N.Y. 19, N.Y.

P-Macmillar Life Series Bks. 1-6 Macmillan

MIMEOGRAPHED MATERIALS

Planning Dinners Without Meat-Reprinted From Home Economics and Nutrition Service Community Service Society, N.Y. By Baltimore City Department of Public Welfare Home Economist

Managing Your Food Dollar- Reprinted From Homemaking Consultants Newsletter-Division of School Extension and Home Economics, School District of Philadelphia by Baltimore City Department of Public Welfare Home Economist

One Dish Meals - Reprinted From Homemaking Consultants Newsletter-Division of School Extension and Home Economics -School District of Philadelphia by Baltimore City Department of Public Welfare Home Economist

"57" Hints For Getting The Most For Your Money -Adapted from Home Economics Consultant, Division of Welfare New Jersey

Clothing Care and Repair- Reprinted from Homemaking Counsultants Newsletter-Division of School Extension and Home Economics School District of Philadelphia by Baltimore City Department of Public Welfare Home Economist

Good Care Helps You Get More Wear From Clothing- From material prepared for the Council of Social Agencies by the Committee for Revision of the Low Cost Budget.

Clothing-Tips On Care -Tips on Buying(Reproduced by permission of Cook County, Illinois, Department of Public Aid, by the Baltimore City Department of Public Welfare.)

Housekeeping-Reprinted from Homemaking Consultants Newsletter-Division of School Extension and Home Economics School District of Philadelphia by Baltimore City Welfare Home Economist

Money Management- Reprinted from Homemaking Consultants Newsletter-Divisions of School Extension and Home Economics -School District of Philadelphia by Baltimore City Department of Public Welfare Economist

Infant Care-Reprinted from Homemaking Consultants Newsletter-Division of School Extension and Home Economics -School District of Philadelphia by Baltimore City Department of Public Welfare Home Economist.

Child Care: Two To Six -from Homemaking Consultants Newsletter-Division of School Extension and Home Economics-School District of Philadelphia by Baltimore City Department of Public Welfare Home Economist

How many persons are in your immediate family? By this we mean how many persons related to each other are living in your home. Many of you have said four, others three, six, five, and nine. You can see that all families do not have the same number of persons living together. Now let us list the persons in each of our families. After reading these lists you realize that family membership differs. We have some families with father, mother, and children. Other families with father and children, others with mother and children, and still others which include grand parents, aunts, and uncles. No matter how many you have in your family, and no matter who these persons are, they will face the same responsibilities as the members of other family units. Each person will need to love and respect all other family members, and each person must assume certain duties within the home in order to have a good family group.

Write an experience chart about:

a happy family
an unhappy family

Count your family members. Count the number of grandmothers in the families of the class. Count the number of grandfathers, aunts, uncles, etc. Who has the largest number of sisters and brothers?

We know that brothers and sisters sometimes quarrel. This is to be expected. However, the quarrels should not be frequent, nor should they affect the love which brothers and sisters feel for each other. Can you tell us some of the things that cause quarrels between brothers and sisters? Now that we know what brothers and sisters quarrel about, can you suggest how such quarrels can be avoided? Do you think that respecting each others rights would have helped to prevent a number of these quarrels? Let us try to list some of your rights as you see them.

List three ways to start a quarrel.

List three ways to avoid a quarrel.

We mentioned that each family member should be willing to perform certain duties in the home. We call this accepting responsibilities. Let us list the duties which each of you has in your home. Let us compare the boys' list with the girls'. How many duties are alike? How many are differnt? If there are no daughters in the home, do you think the boys should do some of the tasks usually done by the girls? Why? If there are no sons in the home, do you think the girls should do some of the tasks usually done by the boys? Why?

Some duties a boy should have at home

1.
2.
3.
4.
5.
6.

Some duties a girl should have at home

1.
2.
3.
4.
5.
6.

What things are absolutely necessary for the welfare of the family? You listed food, clothing, and shelter, and some of you listed money. You are correct. You need money to get the first three. Which member of the family usually has the responsibility of earning the money? Who else must often help with this responsibility?

Let us take the three basic necessities which you mentioned -- food, clothing, and shelter -- and see what we know about each one of them. Shall we start with food?

FOOD

Let me list all the things you know about food. I believe it will help your thinking if I place three topics on the board and list the information under these headings.

| Nutrition and Balanced Meals | Buying Food | Care and Preparation of Food |
|---|---|---|

(Pupils will volunteer information concerning all aspects of food.)

We are not going to study <u>all</u> about foods because the girls will learn this in Home Economics. However, since the boys are not going to Home Economics, we are going to study a few important things about nutrition and balanced meals, buying food and care and preparation of food.

Why must your body have food?

1. To build and repair the body
2. To furnish energy
3. To make the body function normally

Which everyday foods help to do these three things?

1. Eggs, meat, poultry, fish, peanut butter, beans and peas, milk, cheese or milk products <u>will help build and repair our bodies.</u>
2. Potatoes, fortified margarine or butter, flour, bread, whole or enriched grains and cereals <u>will furnish energy.</u>
3. Citrus fruits, cabbage, salad greens, tomatoes, green and yellow vegetables <u>will help the body function well.</u>

Make charts showing the three food groups.

Draw or use pictures from old magazines.

Tell what each food does for the body.

Now that you know the value of these foods, let us try to plan some simple meals which will give your body what it needs to keep strong and well.

Learn to spell:

boil

fry

scramble

Write sentences telling three ways to cook eggs.

Keep a notebook of simple recipes.

Bring in clippins from the paper which tell about food.

## Breakfast

1. Milk=building and repair

   Egg=building and repair

   Toast =energy

   Butter = energy

2. Hot chocolate=building and repair

   Cereal =energy

   Toast=and butter energy

   Prunes= regulate body function

3. Milk=repair

   Orange juice=work normally

   Toast=energy

   Bacon =building and repair

Let us check these three menus and see if each will give the body what it needs.

## Lunches

1. Lettuce, Tomato, Bread ) Sandwich
   Milk
   Apple

2. Ham, Lettuce, Bread ) Sandwich
   Milk
   Orange

3. Peanut butter, Jelly, Bread ) Sandwich
   Milk
   Banana

Write next to each food its value to the body.

Figure the prices of several lunches from a chart showing items and prices.

## Dinners

1. Meat
   Potatoes
   Green vegetables
   Bread
   Milk
   Stewed fruit

2. Poultry
   Rice
   Spinach
   Bread
   Milk
   Fruit pie

3. Fish
   Macaroni
   Stewed tomatoes
   Bread
   Milk
   Custard

Write next to each food its value to the body.

You may have noticed that we have not included soups or salads in either our luncheon or dinner menus. Both are excellent in summer and winter meals. Canned as well as homemade soups are extremely nourishing and easy to prepare and serve. There are many salads which are easy to prepare, and help the body to function well.

Cut pictures of lettuce; etc. from old magazines and arrange different salads.

Can you mention some different types of salads you eat and enjoy?

Here are some suggestions for salads

Sliced hard-cooked eggs on lettuce with mayonnaise

Stuffed eggs on lettuce with mayonnaise

Sliced tomatoes on lettuce with a dressing

Tuna salad

Shrimp salad

Chicken salad

All types of fruit salads

Pineapple and creamed cheese on lettuce

Diced apples and nuts with mayonnaise on lettuce

You can add many more.

## PLANNING DINNERS WITHOUT MEAT

You can stretch your food dollar by using other foods besides meat in planning dinner menus. Eggs, cheese, dried beans and peas provide good body building materials and vitamins for growth and health protection. Dinners using these foods for main dishes are satisfying, add variety to your meals, and cost less than meat.

## EGGS IN MAIN DISHES

"Good things come in small packages". This is especially true when you think of an egg and all the nourishment it contains -proteins, minerals, and vitamins.

Remember that eggs are perishable and keep them in your refrigerator at all times.

Try using them in meals like these:

*Mexican Scrambled Eggs
Potatoes boiled in Jackets  Green Beans
Bread - Creamy Rice Pudding
Milk for Children  Tea or Coffee for Adults

**********

*Egg and Potato in White Sauce
Carrots  Cole Slaw
Apple Sauce  Peanut Butter Cookies
Milk for Children  Tea or Coffee for Adults

**********

Egg Cutlets  Parsley Potatoes  Peas
Celery  Bread
Sliced Banana
Milk for Children  Tea or Coffee for Adults

## CHEESE IN MAIN DISHES

Cheese makes a main dish that is good to eat, inexpensive, and high in food value. No waste! Cheese is all food!

With your main dish of cheese plan to serve a green leafy vegetable and raw vegetable strips or salad to add color and crispness to your menu.

Wrapping cheese in waxed paper before storing in refrigerator will help to keep it from drying out.

Suggestions for dinner menus using cheese:

*Tomato Cheese Rarebit on Toast
Potatoes boiled in Jackets Savory Kale
Raw Turnip Strips
Chocolate Pudding
Milk for Children Tea or Coffee for Adults

**********

*Cheese Puff
Green Beans Escarole & Green Pepper Salad
Baked Apples with Raisins
Milk for Children Tea or Coffee for Adults

**********

*Cheese, Spinach & Noodle Casserole
Carrot and Raisin Salad
Bread
Ginger Bread
Milk for Children Tea or Coffee for Adults

## TOMATO CHEESE RAREBIT

½ small onion
1 green pepper, chopped
2 tablespoons fat
2 tablespoons flour
1 No. 2 can tomatoes
½ pound American cheese, cut in small pieces
1 teaspoon salt
2 eggs, well beaten

Cook onion and green pepper in fat until lightly browned. Add flour and blend. Add tomatoes, cheese and salt. Cook over low heat, stirring constantly until cheese melts and mixture thickens. Pour some of the hot mixture into beaten eggs. Mix well, then pour back into rest of tomato mixture. Blend and cook until thick and creamy. Serve on toast. Serves 4 - 5.

## CHEESE PUFF

10 slices bread
Margarine
½ pound American cheese, cut in small pieces
3 eggs, beaten
2½ cups milk
½ teaspoon salt

Spread bread with margarine. Cut two slices diagonally to make eight triangles. Cube remaining bread and arrange in layers with cheese in greased baking dish. Mix rest of ingredients, add to bread and cheese. Place bread triangles around edge of the dish. Bake in a slow oven (325°) until firm, about 45 minutes. Serve at once. Serves 4 - 5.

## CHEESE, SPINACH AND NOODLE CASSEROLE

2 cups cooked noodles
2 cups cooked chopped spinach
½ pound American cheese, cut in small pieces
2 tablespoons fat
2 tablespoons flour
2 cups milk
Salt and pepper

Melt fat, add flour and mix well. Add milk, salt and pepper and cook, stirring constantly until thickened. Arrange layers of noodles, spinach and cheese in a greased baking dish. Add white sauce. Bake in moderate oven (325°) for 30 minutes. Serves 4 - 5.

## DRIED BEANS AND PEAS IN MAIN DISHES

Dried Beans and Peas make good main dishes too. There are red, white, black beans; green, yellow, or black-eyed peas. Both beans and peas are rich in iron.

Plan to include milk, cheese or eggs in the menu when dried beans or peas are the main dish. For example - serve a cottage cheese salad, a milk pudding, custard, or just a glass of milk to drink.

To save over-night cooking try the new short cut method:

*Add water to beans and boil 2 minutes

*Remove from heat

*Let stand in same water for 1 hour

*Use them in preparing your favorite recipe

Dinner menus using dried beans:

*Minestrone Soup
Apple and Raisin Salad Pumpernickel Bread
Tapioca Cream Pudding
Milk for Children Tea or Coffee for Adults

**********

*Baked Beans, Michigan Style
Cabbage, carrot and Green Pepper Salad
Corn Bread
Lemon Sponge Pudding
Milk for Children Tea or Coffee for Adults

**********

*Mexican Rice and Beans
Mixed Green Salad Garlic Bread
Oatmeal Cookies Hot Cocoa

MINESTRONE SOUP

1 cup dried pea beans
6 cups boiling water
1 cup canned tomatoes
4 potatoes
1 large carrot
2 onions
4 pieces celery
½ small head cabbage
4 cups boiling water
Salt and pepper to taste

Add 6 cups water to beans and boil 2 minutes. Remove from fire and let stand without draining 1 hour.

Simmer in same water until beans are nearly done. Then add tomatoes, vegetables cut in small pieces, the 4 cups of water and seasonings. Continue cooking until vegetables are tender. Serves 4 - 5.

## MEXICAN SCRAMBLED EGGS

1 small onion, chopped
1 small green pepper, chopped
2 tablespoons fat
½ cup canned tomatoes
1 teaspoon salt
Pepper
6 eggs, slightly beaten

Brown onions and green pepper in fat. Add tomatoes, salt and pepper. Cook 3 minutes. Add eggs and cook over low heat, stirring gently as the mixture thickens. Serve at once. Serves 4-5.

## EGG AND POTATO IN WHITE SAUCE

6 cooked potatoes, sliced
6 hard cooked eggs, sliced
2 tablespoons fat
2 tablespoons flour
2 cups milk
Salt and pepper to taste
½ green pepper, chopped
1 cup soft bread crumbs

Melt fat, add flour and mix well. Add milk, salt and pepper, and cook, stirring constantly until thickened. Add green pepper. Place alternate layers of potatoes and eggs in a greased baking dish and add the white sauce. Sprinkle with bread crumbs. Bake in a moderate oven ($350^0$) 15 to 20 minutes. Serves 4-5.

## EGG CUTLETS

6 hard cooked eggs, chopped
6 tablespoons chopped onion
3 tablespoons fat
4 tablespoons flour
1 cup milk
Salt and pepper
Flour
2 tablespoons fat

Melt fat, add flour and mix well. Add milk, salt and pepper and cook over low heat. Stir constantly until very thick. Add eggs and onion. Chill for ½ hour. Shape into patties with a tablespoon and roll in flour. Melt fat in frying pan and cook patties until lightly browned, turning once. Serves 4-5.

## BAKED BEANS, MICHIGAN STYLE

1 pound dried navy beans
6 cups boiling water
½ cup molasses
½ pound salt pork

Add 6 cups water to beans and boil 2 minutes. Remove from fire and let stand without draining 1 hour. Simmer in same water until beans are nearly done. Drain beans, saving the liquid. Put beans into a shallow baking pan, add molasses and enough of the liquid to cover beans. Arrange thin slices of the salt pork over the top. Bake in moderate oven until beans are tender, adding more liquid if needed. Serves 4-5.

## MEXICAN RICE AND BEANS

1 cup red kidney beans
3 cups boiling water
3 tablespoons fat
1 large onion, chopped
1 green pepper, chopped
1 clove garlic, if desired
1 cup rice
1 No. 2 can tomatoes
1 teaspoon chili powder
1 teaspoon salt

Add 3 cups water to beans and boil 2 minutes. Remove from fire and let stand in same water 1 hour. Simmer in same water until tender, adding more water if needed. Drain beans, saving liquid. Melt fat, add onion, green pepper, garlic and rice. Cook 10 minutes, stirring occasionally until onion and rice are lightly browned. Add liquid from beans plus enough water to make 2 cups, tomatoes and salt. Cover and simmer 15 minutes. Add beans, cover and cook until rice is tender. Serves 4-5.

Meatless main dishes:
*Cost less than meat
*Can be prepared ahead of time
*Are good to eat and high in food value

## PLAN CAREFULLY - WATCH PENNIES

1. Plan Meals
   with cost in mind
   with age of different family members in mind
   with idea of using leftovers
   with appetite appeal for all the family
   with right foods and proper amounts to meet the daily food needs - using the Basic Daily

   Food Guide:

   | | | |
   |---|---|---|
   | Milk group - | Children | 1 quart |
   | | Adults | 1 pint or more |
   | | Pregnant women | 1 quart |

   Meat group - beef, veal, pork, lamb, poultry, fish, eggs. Dry beans and peas

   Vegetable - fruit group - dark green or yellow vegetables, citrus and other fruits, and potatoes - 4 or more servings

   Bread - cereal group - whole-grained, enriched or restored - 4 or more servings

2. Plan marketing

   Keep a scratch pad in the kitchen to jot down items as needed - take this to market with you.
   Shop where best buys are offered.
   Learn grades and brands of foods.
   Read labels.
   Buy food in season.
   Watch newspaper ads and week-end specials.

3. Store Foods Properly (to save food and money)

   Buy in large quantities if you have proper storage room.
   Refrigerate only foods which need to be kept cold.

## USE DRY MILK IN YOUR OWN RECIPES

In any recipe calling for milk, you may simply add the milk powder to the other dry ingredients. Then add the water for the required amount of liquid.

Enrich your cooking with nonfat dry milk. Increase the food value of some dishes by adding extra dry milk. Dry milk may be added to fresh milk to increase the food value in some recipes. Here are some ways to use dry milk in your everyday cooking.

PANCAKES, WAFFLES AND MUFFINS - Use 4 to 6 tablespoons dry milk for each cup of milk or water in recipe.

COOKED CEREALS - Add ¼ to ½ cup dry milk powder to each cup of cereal before cooking.

MASHED POTATOES - Mash, then add ¼ cup dry milk powder to each cup of potatoes. Use either the water the potatoes were cooked in, or fresh or canned milk, to give the right consistency.

BISCUITS, CAKES AND COOKIES - Use 4 tablespoons and 1 cup of water for each cup of milk called for in the recipe, or add 2 to 4 tablespoons dry milk powder to each cup of fresh milk.

MEAT LOAF, MEAT BALLS, HAMBURGERS - Use ¼ cup dry milk powder to each pound of ground meat.

WHITE SAUCES AND CREAM SOUPS - Use 4 tablespoons dry milk powder with each cup of water or milk.

### CUSTARDS, PUDDINGS AND BEVERAGES

Use 4 to 6 tablespoons dry milk powder with 1 cup of water for each cup of milk called for in the recipe, or add 2 to 4 tablespoons to each cup of fresh milk.

Food Value of Dried Milk: Dried Milk has all the nourishment of fresh milk except vitamin A, fat and water which have been removed. It has the calcium, vitamin B, natural sugar, and proteins that make milk such a valuable food. It helps to build healthy bodies, strong bones and teeth.

FOOD TIPS

Collect and try low-cost recipes.

Vary the flavor of inexpensive foods by using different seasonings.

Bake foods that are otherwise expensive to buy.

Use canned and dried milk as a substitute for fresh milk.

Use cheese, eggs, fish, dried beans and peas as a meat substitute.

Vegetable cookery:

Use perishable vegetables first.

Do not soak vegetables - vitamins and minerals will be lost.

Cook all vegetables in boiling, salted water - use as little water as possible.

Use any water left in soups or gravies.

Meat cookery:

Do not sear oven meats - this shrinks them and burns the gravy.
Roast meats and poultry at $325^{0}$ to $350^{0}$.
Roast, fry, or broil only the more expensive tender cuts of meat.
Braise or simmer only the less expensive, less tender cuts of meat.

## ONE DISH MEALS

In order to have attractive, wholesome meals on limited budgets, the home-maker must plan carefully every "food penny".

Some things to consider when planning meals

Size of family
Age of family members and their activities
Size of storage space
Variety in color texture and flavor
Time required for preparation of food
Children's share in preparation, serving of food, and cleaning up

Some ways to save money

Study the food advertisements in the paper for best buys
Use dry skim milk in cooking as well as for drinking
Buy day old bread and cake
Plan to use those vegetables and fruits which are in season
Use whole grain cereals
Learn to prepare the cheaper cuts of meat
Buy fortified margarine
Buy the larger quantity if you can use it
Buy grade "B" eggs
Use peanut butter, cottage cheese, cheddar cheese, eggs, dried beans and peas, milk desserts on days when you do not serve meat or fish

One dish meals save time, energy, and money, and at the same time can be tasty and nutritious.

Remember to make each meal a pleasant experience.

## RECIPES FOR ONE DISH MEALS

### "COMPANY" LIMAS AND FRANKFURTERS

1½ lbs. large dry limas
2 tsp. salt
1 can tomato soup
1 cup catsup
½ cup chopped onions
3 tbsp. dark molasses
2 tbsp. vinegar
10- 12 frankfurters
10- 12 strips of cheese

Wash beans. Add 1½ qts. boiling water. Cover. Simmer until tender, about 1½ hrs. Add salt after 1 hr. Place beans and stock in large baking dish. Combine all ingredients except cheese and frankfurters. Pour over beans. Slit frankfurters almost to the end. Insert strip of cheese and arrange on beans. Bake uncovered in a moderate oven ($350^0$) 20 to 25 minutes. Serves 8.

### SPICY SAUSAGE HASH

1 lb. sausage meat or hamburger
1 cup uncooked elbow macaroni or 2 cups diced white potatoes (raw)
1 cup chopped onions
1 can tomatoes
2 tbsp. sugar
1 cup milk

Brown sausage or hamburger with onion in frying pan, breaking meat up with a fork as it cooks. Cook 2 to 3 minutes; drain off all fat. Stir in remaining ingredients; heat to boiling; cover; simmer 20 minutes, or until macaroni or potatoes are tender. Serves 4.

## CHICKEN NOODLE DINNER

1 large stewing chicken, cut up
flour, salt, pepper
6 tbsp. shortening
8 cups water
1 small onion, minced
2 tsp. salt
¼ tsp. pepper
12 small white onions peeled
8 medium sized carrots, quartered
1 pkg. medium noodles (8 oz.)

Coat chicken with flour seasoned with salt and pepper; brown in shortening in large kettle; add water, minced onion, salt and pepper; cover; simmer 2½ hours, or just tender. Add white onions and carrots; cook 20 minutes, or until tender; remove with chicken from broth; keep hot. Add noodles to broth; cook, stirring often, 10 minutes; serve with chicken and vegetables. Serves 6-8.

## POEM

Warm all the kitchen with Thy love
And light it with Thy peace.
Forgive me all my worry,
And make my grumbling cease.
Thou who didst love to give men food,
In room or by the sea,
Accept this service that I do.
I do it unto Thee.

Mrs. Billy Graham

## "57" HINTS FOR GETTING THE MOST FOR YOUR MONEY

(Adapted from Home Economics Consultant, Division of Welfar, New Jersey)

### PLANNING AND MARKETING

1. Plan your meals ahead for a few days or a week if you can.
2. Have a list of foods and amounts when you go to the market.
3. Shop around for the best buys and watch for sales and weekend specials.
4. Buy the brand or the quality according to how the food will be used. A less expensive brand or quality will often have the same food value and serve the same purpose.
5. Read and study labels. Know how much you really get.
6. One dish meals save food, money, fuel and time.
7. Buy only the amounts of food that you can use or store properly.

### CEREALS

8. Buy whole grain or enriched bread. Day old bread is cheaper and just as nutritious.
9. Buy dry uncooked cereals as oatmeal, cream of wheat, farina, etc. Ready to eat cereals are more expensive.
10. Don't throw away stale bread, or cookies or cake. Give them fresh flavor by heating in the oven or double broiler or use up crumbs in custards and puddings.
11. Use molasses in seasoning baked beans, making gingerbread and other baked products. It has more food value than white sugar because it contains an important blood building mineral.

FRUITS AND VEGETABLES

12. Save liquids from canned fruits for gelatin salads and pudding sauces.

13. Liquids from canned vegetables are ideal in soups, sauces and gravies.

14. Use dried fruits frequently. They usually need little or no added sugar.

15. Use fresh fruits and vegetables in season.

16. The best way to get the most food value from potatoes is to wash them and cook them in their skins.

17. If peeled potatoes are used, keep the peelings thin.

18. Use fresh green vegetables. Vitamins disappear as vegetables wilt.

19. When storing green vegetables, keep them cool, damp and lightly covered.

20. Wash green vegetables quickly, never soak - always lift the vegetables from water to free from sand and grit.

21. Save all outside coarse leaves and stems for the soup kettle.

22. Start cooking all vegetables in boiling salted water and cook only until tender.

23. Eat more of what you pay for. Cook the cabbage leaves and stems, leafy tops of young beets and turnip greens. Use tough stalks of celery in soups and stew.

24. If price does not permit the use of citrus fruit (oranges, grapefruits, etc.) use fresh tomatoes in season, or canned tomatoes or tomato juice. Use twice as much tomatoes or tomato juice as orange or grapefruit juice. Use liberal amounts of cabbage and salad greens.

EGGS

25. Brown shell eggs have the same food value, flavor or quality as white shell eggs. There is no advantage to paying a higher price for either a brown or a white shell egg.

26. Keep eggs in the refrigerator always. Use eggs with cracked shells first. Store eggs in a covered bowl or pan away from foods with a strong odor. Remove from the refrigerator only the eggs you will use immediately.

27. Grades B and C eggs are as nutritious as grade A and are cheaper.

28. If beating egg white, let stand a while; they whip up best when they are at room temperature. For a larger foam, add a pinch of salt before beating.

29. Cook eggs at low heat to keep them tender and appetizing.

DRIED BEANS

30. One pound of dried beans and peas will provide 7-9 servings. Soak dried beans and peas before cooking and use the soaking water for cooking.

31. A quick way to soak beans and whole peas is to start by boiling them with water for 2 minutes. Remove from heat and soak 1 hour and they are ready to cook.

SKIM MILK

32. Along with fluid milk, use some evaporated or dry skim milk. Dry skim milk is most economical, evaporated (canned milk) is more economical than bottled milk. Milk from dry skim milk powder may be mixed with milk made from evaporated (canned) milk or bottled milk.

33. Dry skim milk has the same food value as milk with the top milk poured off. By just adding water, according to directions on the package, you have liquid skim milk costing only a few pennies a quart. Use this skim milk in the same way you use regular milk in recipes for cereals, soups, casserole dishes, creamed or scalloped dishes, gravies, breads, biscuits, pudding, cakes and hot or cold flavored drinks such as cocoa and milkshakes. In using dry skim milk:

$\frac{1}{4}$ cup dry skim milk plus 1 cup water makes 1 cup skim milk

1 cup dry skim milk plus 1 quart water makes 1 quart skim milk

FATS

34. Fortified margarine is cheaper and just as nutritious as butter.

35. Save fats from meat to use in cooking and seasoning. Keep heat moderate or low so fat will not burn or turn dark. Store in refrigerator until used.

MEAT

36. Try combining rice, spaghetti or noodles with meat to make it go further.

37. Cook or reheat meat to keep it from spoiling if you have more than your family can eat in a day or two.

38. Save drippings and trimmings from meat and use them in soups, gravies and vegetables. If you do this, you won't have to buy so much fat.

39. Use leftover meat for hash, pie, stuffing peppers or in sandwich spreads.

40. Make your selection of meat from the less demanded cuts, including shoulder or chuck cuts, flanks, breast, neck, shank, etc.

41. Know how much to buy to serve your family. Buy roasts and pot roasts to serve 2 to 3 meals, other cuts in just the right amount for 1 meal with no leftovers.

Allow $\frac{1}{4}$ lb. per serving for boneless cuts and ground meats.
Allow $\frac{1}{2}$ lb. per serving for cuts with some bone.
Allow 1 lb. per serving for poultry.
Allow 3 oz. per serving for canned, cooked, boneless meats like corned beef, and similar meats.
Allow 1 - $1\frac{1}{2}$ oz. per serving for dried beef.
Allow 2 - 3 oz. per serving for sausage products like bologna, luncheon meat, etc.
An 8 oz. package of bacon (9 - 10 slices) serves 4. Bacon ends cost less.

42. For limited budgets, extend the meat flavor in casserole dishes, filling soups, or in meat loaves by using vegetables, bread crumbs or cereals, such as oatmeal or rice, with the meat.

43. Save bones and trimmings for seasoning soup.

44. Use meat drippings for seasoning or frying.

45. Cook meats at low temperature to save all possible juices in the meat. This gives better flavor and reduces meat shrinkage. Medium cooked beef and lamb are finer in flavor and have less cooking shrinkage.

46. Use pork or lamb liver instead of beef liver. Food value is the same and the cost is only a fraction of that asked for calf's liver, because of its demand. Calf's liver actually has less food value than liver from lamb, pork or beef.

47. Ground or chopped beef, lamb, veal or pork can be made into meat cakes, balls, loaves or used in Spanish rice, casserole dishes or soups. Because it has no bone it goes a long way and is always tender.

48. Simmer shanks or hocks of beef, veal, lamb or pork, or smoked shoulder with vegetables. The cooking water or broth makes good soup for a second meal if vegetables and rice or noodles are added.

49. Take good care of cooked meats to keep them fresh and appetizing for leftover dishes. Cut all meat and fat from bone, place in refrigerator dish, cover and keep cold. Use cubed left over meats in casseroles, scalloped dishes, cream sauce or in cold salads. The smaller pieces may be ground and used in patties, loaves, croquettes, timbales, sandwich fillings or omelets.

50. These cuts of meat help you save money on meats:

<u>Beef:</u>

Flank steak for braising
Chuck pot roast
Rump pot roast or oven roast
Chuck steaks for braising
Bottom round for braising
Neck, chuck or plate meat for stewing
Ground beef from neck, chuck, flank or plate for patties, steak, loaves
Ox joints for stewing or braising
Beef heart for stewing or braising
Beef tongue for cooking in water
Beef kidney for stew
Beef brains

(<u>Braising</u> - cooking meat by searing in fat, then simmering at low temperature in a covered pot with a little liquid. Vegetables may be added.)

51. Pork:

Fresh pork shoulder for roasting
Fresh or smoked picnics for roasting or cooking in water
Loin end for chops or roasts
Neck bones for cooking in water
Hogs' or pigs' feet for cooking in water
Pork tails for cooking in water
Pork cheeks or jowls for cooking in water
Pork liver, to fry, broil, braise or grind
Pork kidney for stew
Pork hearts for braising
Bacon ends for frying or cooking with vegetables

52. Lamb:

Bone-in shoulder for roasting
Rolled boneless shoulder for roasting or pot roasting
Brest, boned or pocketed for roasting, or cut for stew
Neck for stewing
Shanks for stewing, braising or for curry
Ground lamb brest, shoulder, or flank for patties and loaves
Lamb hearts for braising
Lamb kidneys for stewing or broiling
Lamb brains

53. Veal:

Bone-in shoulder for roasting
Boned, rolled shoulder for roasting
Breast, boned and rolled or pocketed for pot roast or cooking in water
Brest, shoulder, flank or neck cut up for atew
Ground veal from neck, flank, shoulder or breast for patties, loaves or mock chicken legs
Kidneys for stew
Hearts for braising
Tongue for cooking in water

54. Organ meats such as liver, kidney, heart and brains are a good nutritional buy for the money.
55. Chicken for stewing or fricassee costs less and goes further than roasting chicken.

MEAT SUBSTITUTES

56. Use fish and cheese as meat substitutes. Use peanut butter occasionally as a supplementary source of protein.

57. When using cheese, cut off only as much as you need, then store the rest tightly wrapped in paper or clean cloth. Use a low heat when cooking cheese. Grate or grind up cheese that has become hard and use it in cooking.

The majority of families must be careful of their household expenses. Money spent for food is usually the largest item in the family budget. This is why it is so important for you and your family to know four things:

1. How to plan inexpensive yet well-balanced meals.
2. How to shop for food
3. How to prepare and store food
4. How to use "left-over" food

Bring in food market ads. Compare prices on sugar, flour, eggs, and bread. Figure savings made on large quantities of:

Soap powder
Bleach
Cereal
Flour
Sugar
Etc.

Clothing

The girls learn many important facts about selecting clothing, care of clothing, and the making of simple garments in their home economics classes. The boys are not so fortunate. Unless they go into the Armed Forces and learn care of clothing, they are often helpless when an e mergency arises and they must take care of their own clothing. We ar e therefore, going to study some main facts concerning selecting

clothing and care of clothing so that the boys will know what to do when they must assume responsibility for these two things.

When you select clothing, first determine your real needs and list them. Look over your clothing in order to see <u>exactly</u> what you need. Next, check what you have to spend. If you do not have enough money to buy everything you need (and who does!) decide on one or two articles that are the most necessary.

Let us assume that a boy is checking his clothes because he knows school starts in two weeks. Let's list what the average boy might have. (Get lists from class.)

Bring in newspaper "ads" and check prices of clothing.

Now, let's assume that John finds he needs the following: shoes, socks, trousers, and a jacket. He does not have enough money for all, so he examines his school shoes first of all. He knows they are a <u>must</u>. He decides that the uppers are good so he will have them re-soled and buy new laces. This saves part of his money. He finds that his socks are in a very bad state. He decides to buy four pairs of socks and one pair of khaki pants. He hopes to use his old jacket until he can save for a new one.

What should John do before he goes shopping for his socks and trousers? Yes, he looks at the ads. Is it always best to buy the cheapest items? Why not?

How can boys and girls keep clothing looking neat?

1. Wash often
2. Hang up to air after use
3. Change after school
4. Keep in good repair

Teachers will find the following pamphlets helpful.

Clothing Care and Repair

Good Care Helps You Get More Wear from Clothing

Clothing - Tips on Care

Keeping clothing in good repair requires constant attention. List some minor repairs which should be attended to weekly if necessary.

Replacing missing buttons

Stitching ripped seams and hems

Mending holes in socks and other garments.

Plan for class to have Home Economics teacher discuss and demonstrate how to launder or clean silk, cotton, wools, etc.

## ITEMS FOR THE SEWING BASKET

Needles of different sizes
Mercerized thread of assorted colors
Darner
Darning thread
Tape measure
Thimble
Hooks and eyes
Snap fasteners
Mending tape
Pin cushion
Pins
Button thread
Buttons

## MENDING SUGGESTIONS

Sewing on buttons: Place two pins between button and garment. Sew on button and remove pins to give an "easy fit".

Darning socks: Darn the hole when it is small. Use a darner and weave stitches smoothly to fill the hole.

Invisible mending: Match the design in the garment. Use patches to reinforce worn spots. Make knee and elbow patches from discarded leather gloves.

GOOD CARE HELPS YOU GET MORE WEAR FROM CLOTHING

Give wool and similar garments a good brushing with a medium brush after each wearing. Dust not only spoils the appearance of the fabric but cuts the fibers, and in time actually damages the fabric. Hang garments properly on hangers. Fasten the top button of the garments so that collars and shoulders will not sag out of shape. Hang skirts from the waistbands. Do not overcrowd your closet.

Airing outside is good for fabrics and helps remove ordinary creases and wrinkles. Press garments only when necessary.

Press wool and synthetic fabrics on the wrong side. If a fabric is unusually thick, however, right side pressing is preferable but a damp cloth should be used. Place the cloth over the fabric and iron only on the pressing cloth. Rayon and wool fabrics should be slightly damp when pressing is finished. Hang on shaped hangers so that the garments will dry in natural lines. In pressing new seams on a home sewn garment, press seams open on wrong side. A hot iron will melt some types of nylon and other synthetic fibers. When the iron seems to stick to the fabric, it has reached the danger point.

Mend holes as soon as they appear. Tiny holes can be made practically unnoticeable if mended in time. Thin places should be reinforced with a patch or darn to prevent possible holes.

Use mild soap or detergent and almost cool water for washing and rinsing synthetic fabrics, silk and wool. The garment should be squeezed or worked in suds and not rubbed,

rinsed thoroughly through several waters, and the water squeezed from the garments (no wringing). The garments may be dried by wrapping them in a cloth and letting them stand only a few minutes, or hanging them in a shady place until partly dry, some may drip dry. Iron with a warm iron.

Some wool and blended fabrics can be hand-laundered and do not have to be dry cleaned. The label should give directions for cleaning and washing.

Woolen sweaters should be traced on a paper before they are washed, and that pattern used to shape them. Lay flat on several thicknesses of cloth to dry or place a towel over several thicknesses of newspaper then spread the sweater out to dry.

Clean and remove spots as soon as they are noticed.

Have children change into old clothing or into playsuits after school.

Turn frayed collars and cuffs on men's and boys' shirts.

New trimmings may give an old dress a new look.

Tack dress shields in all garments made of wool and synthetic fabrics. Perspiration is harmful to these fabrics, causing color fading and weakening fabrics.

Wash hose and underwear after each wearing to get maximum wear. Observe laundering directions given on labels. Turn thin dress hose inside out to put on. Gather the leg part in both hands and slip the foot into the toe, drawing the leg part up over the toes carefully. Toenails, fingernails and rings often snag thin hose.

Dust shoes daily and polish frequently. When wet, stuff with newspaper to absorb moisture and hold shape. Have shoes repaired as soon as breaks appear..Keep heels straightened. Some families have a member who can use a simple repair kit for repairing the family shoes. Boys and men's work shoes may be waterproofed by greasing with tallow or commercial waterproofing products.

* From material prepared for the Council of Social Agencies by the Committee for Revision of the Low Cost Budget.

ACHIEVING A WELL PRESSED LOOK

"Know-how" is just as important as good equipment for best results at home, advises the Clothing Specialist, University of Maryland Extension Service.

Wherever possible press on the wrong side of the fabric. When pressing must be done on the right side, a press cloth between the iron and the garment protects the fabric surface. On wool always use a dampened press cloth because wool fabric looks best when it has had moist heat pressing. Even with a steam iron it is still best to press on the wrong side. A steam iron creates its own steam as you press so that a damp cloth is not necessary but a dry press cloth should be used.

It will save you ugly press marks if you hold the iron so that not even the entire weight of the iron rests on the fabric. Press over lightly so that the steam will enter the fabric. Press over lightly so that the steam will enter the fabric. Handle the garment carefully so as not to muss pressed parts. Hang garment on hanger until it dries. After pressing wool with a damp press cloth do not use the hot iron to dry the fabric completely as you would in ironing cotton.

For acetate, rayon or synthetic (man-made) fabrics it is generally better to use a dry press cloth between the garment and the dampened press cloth. Rayon requires a "cool" iron, so it's safest to test the iron heat on a small sample or inconspicious part of the garment before pressing.

CHECKLIST FOR A GOOD FIT

It won't be long before the school bells start ringing. And that means there are clothes to be bought for those fast-growing youngsters.

Most kids know what kind of clothes they want--the style and the color. But it's still Mom's job to see that they fit properly.

Madeline C. Blum, clothing specialist in the Extension Service at Cornell University, has a 6-point checklist

## CLOTHING

### TIPS ON CARE

Clothes will look nicer and last longer if you care for them properly. Some suggestions for the care of clothing are:

1. As soon as you remove outer garments, hang them up carefully on hangers.
2. Children should be taught early to hang up their clothes.
3. Never hang clothes in a closet while they are wet.
4. Air and brush clothes frequently to remove dust and lint.
5. Keep clothes clean. Launder washable clothes. Consider a self-service dry cleaning shop for other clothes.
6. Remove spots or stains as soon as possible. A small can of cleaning fluid in the home is helpful in removing grease spots.
7. Be sure clothes are clean when you store them for a season.
8. Hosiery should be washed before the first wearing and after every wearing.
9. Repair clothing before washing or cleaning. Mend rips. Sew on buttons. Mend socks.
10. Keep shoes polished and repair heels before too worn.
11. Dry out damp shoes carefully away from the heat. Stuff them with paper, or use shoe trees to keep their shape.

Consider the care required to keep garments clean and fresh when you select them.

Always read and follow the instructions given on the label for the care of clothing.

Use cold water for removing many spots. Some grease spots can be removed by ironing the spot between two blotters, others with a cleaning fluid. See your homemaking consultant for details.

Store knitted garments in a drawer or on a shelf.

Protect zippers by closing them before laundering.

Wear an apron when doing household chores.

Interest children in clothing care and repair by setting a good example.

Give your clothing both daily and seasonal care.

DAILY CARE

Remove spots and mend clothes as soon as possible
Hang up clothes
Use clean dress shields
Polish shoes
Air and brush clothes regularly

OCCASIONAL CARE

Send clothes which cannot be washed to dry cleaner (coats, suits, etc.)
Store seasonal clothing
Wash or dry clean clothes before storing in a clean , dry place
Use a moth repellent on woolens or wrap clean woolens in clean paper.

ESSENTIALS FOR CARE OF CLOTHING

Clothes brush
Clothes hangers
Shoe shine kit
Iron, ironing board, pressing cloth
Spot remover
Mending kit
Deodorant and dress shields
Storage space - closet and drawer

TIPS ON BUYING

Before buying clothing for your family, consider these suggestions:

1. Check the clothing you have on hand for each member of the family.
2. Also check the clothing that can be worn after repairing or remodeling.
3. List the new clothing needed. What are the most urgent items?
4. Set aside a definite amount of money each month.
5. Follow the plan you make for clothing purchases. You may be able to spread clothing expenses more evenly. Plan ahead on the big clothing items, such as coats.
6. Check the newspaper ads for sales. Get acquainted with the re-sale, second-hand and thrift shops in your neighborhood.
7. Shop around and compare prices and quality of garments, especially for big clothing items.
8. When choosing children's clothes, buy garments large enough to allow for growth.

How many boys can sew?

Let's try some simple repair jobs. The girls will help.

What "tools" do we need to care for clothing?

Hangers, brush, shoe shine kit, spot remover,
iron and ironing board, sewing basket.

What do we need in our sewing basket?

1. Needles - all sizes
2. Thread -several colors and sizes. Also darning thread
3. Pins
4. Odd buttons, hooks and eyes
5. Tape measure
6. Thimble
7. Mending tape
8. Scissors

Sew on buttons.

Sew up a rip.

Darn a sock.

Patch a pair of trousers.

<u>Cleaning</u>

Whether you live in two rooms or a whole house, you need to keep things clean. Clean living quarters will help the family's health, safety, and spirits. Few things are worse than unmade beds, dirty dishes in the sink, dirty clothes laying around, and clutter over the whole house.

How can we plan for a clean house or apartment?

Have a set time each day to do our cleaning

Keep up to date with our work

Try to have the necessary tools for the job

Start housework early so that there is time for relaxation each day

Let's list the jobs which must be done <u>every day</u>.

Practice setting a table and making a bed

Cooking and serving

Setting table and washing dishes

Packing lunches

Picking up and straightening

Making beds

Getting children dressed for school

Caring for baby

Feeding

Bathing

Dressing, etc.

Let's list the jobs which should be done once a week or oftener.

Washing and cleaning bathroom

Marketing

Washing and ironing

Cleaning rooms

Cleaning and scrubbing kitchen

Defrosting refrigerator

Mending

Changing beds

From old magazines and newspapers collect and mount pictures of cleaning equipment.

Which jobs <u>can</u> you do?

Which jobs <u>do</u> you do?

What do you need to help with the cleaning?

List these.

Teacher will show cleaning equipment.

Usually a good mother is a good housekeeper. Try to be both when you are married.

## SUGGESTIONS FOR PLANNING YOUR HOUSEWORK

MAKE A PLAN WHICH SUITS YOUR OWN SITUATION. PLAN IT WITH YOUR FAMILY.

1. Estimate the time it takes to do the usual necessary daily jobs.
2. Estimate the time it takes to do the necessary weekly jobs.
3. Leave time for the unexpected things which turn up in every homemaker's day.
4. Do only one big job a day: cleaning refrigerator, range, or closets.
5. Start your housework early and stick to it so there will be leisure time later in the day.
6. Mothers should give children more and more responsibilities for household chores as they grow older.

## WORK SCHEDULE

DAILY

Prepare breakfast
Set table night before

Pack lunch

Check to see children are dressed properly for school

Clean up kitchen

Relax for half-hour

Tidy bathroom and bedrooms

Lunch

Relax

Prepare dinner

WEEKLY

Monday------Wash
Clean bathroom
Tuesday----Iron
Market
Wednesday--Defrost and clean refrigerator
Relax or visit
Thursday---Wash and iron
Clean upstairs
Friday-----Clean downstairs
Market
Saturday---Clean kitchen
Change beds

## WORK SCHEDULE (CON'D.)

### MOTHER AND FATHER

Mother should teach children to help her with the housework. She should supervise all jobs done by the children and praise them for good work.

Father should take care of the furnace, trash, and cleaning of basement. He should teach boys to help him.

### CHILDREN

Set table and clear off table

Wash and dry dishes

Make beds and help change beds

Dust

Tidy bedrooms and hang up all clothes and toys

Girls over 10 learn to iron straight pieces

Boys over 10 wash windows, scrub floors, clean up yard and basement

### SHORT CUTS TO CLEANING

Divide your cleaning jobs into daily, weekly and seasonable jobs. Use a system! Do a little each day so the size of the job is not overwhelming.

Store all cleaning equipment in one place. When ready to use it, gather what you need for the job in a basket, box, or shopping cart and take to the room where it is to be used. This saves time and energy.

TIPS AND HINTS:

Dust woodwork and walls often. It makes the seasonal washing job much easier.

Use a clean, old piece of flannel, tied or pinned over the bottom of a broom, to dust the walls and ceilings. Shake and turn the flannel frequently to keep it clean.

Wipe off finger marks from painted or enameled surfaces as soon as they appear. Use mild soap and a damp cloth.

Dust walls from ceiling to floor, using an upward and outward stroke.

Wash walls up from floor to ceiling using a circular motion to prevent dark hard-to-remove streaks.

Use newspapers to:
polish mirrors and windows (crumple a single sheet in your hand)
protect linoleum after scrubbing
protect sink or table when preparing vegetables

Rid rooms of stale tobacco smoke by placing a saucer of ammonia or vinegar in the room overnight.

Remove iron rust stain from a sink or bathtub by rubbing it with a cut lemon or vinegar.

Use a dry mop, instead of a broom, on the kitchen floor to take up crumbs and dust. This will almost act like a magnet! Clean the mop by turning it upside down on newspaper and run the vacuum nozzle over it.

Use a cloth wrung out in a solution of hot water and ammonia or vinegar to wipe a greasy range top.

Clean the garbage can with boiling, soapy water once a week. Air it and when it is dry, place a tablespoon of Borax in the bottom of the can. This will keep insects out and eliminate strong odors.

Polish mirrors or windows with a solution of one tablespoon of ammonia or vinegar to one quart warm water. Apply with a lintless cloth and polish with crumpled newspapers. Do not wash glass while sun is on it!

Keep household sponges fresh by soaking them in cold salt water.

Dust high objects first so that falling dust can be gathered later without having to dust a second time. Dust before using the vacuum cleaner.

Wax window sills to protect the paint from rain and dirt. They will wipe off easily.

Wax the dustpan and dirt will slide off more easily.

## MONEY MANAGEMENT

Is your money spent before the next payday comes around? Would you like to have a plan for spending your money which would make each member of your family happy?

Money spending is a family affair.

Try this plan for spending:

1. Write down all the money which comes into your home each week. $_____

2. Write down how much you must have each week for the following:

| | |
|---|---|
| Rent or Mortgage Payments | $_____ |
| Insurance | _____ |
| Installment payments | _____ |
| House taxes (if you own) | _____ |
| Total | |

3. Write down what you spend this week for:

| | |
|---|---|
| Food | _____ |
| Clothing | _____ |
| Carfare and Gasoline | _____ |
| Fuel | _____ |
| Utilities (gas, light, and telephone) | _____ |
| Entertainment | _____ |
| Church | _____ |
| Doctor and Dentist | _____ |
| Savings | _____ |
| Total | |
| | $_____ |

4. Add totals 2 and 3

5. Compare this with item 1 which is the amount of money you really have.

How can you make these totals match?

<u>Here are a few suggestions</u>:

a. Items in 2 cannot be changed easily. You cannot lower the cost of housing unless you decide to move. This may not be wise.

b. You can buy less on installments and not buy anything more until what you have is paid for.

c. Items in 3 can be changed by:

wise food buying and less waste

comparing prices and asking for specific amounts - pound, quart, yard, etc., never 50 cents worth

paying cash and saving carrying charges and bill collectors' fees

mending and making your family clothes

walking more and riding less and making good use of exchanges

using fuel carefully and not overheating your house - 70° is a good temperature

not wasting your electricity or gas

cutting out movies, etc., until your plan for spending works

Each family must adjust the above plan to suit its own problems.

Ask your Home Economist to help you make a plan to suit your family.

SWEDISH PROVERB: He Who Buys What He Does't Need
Steals from Himself.

Caring for the very young and the aged or ill

You will study a fine unit on taking care of young children when you reach the ninth grade and some of you will be fortunate enough to get a real home nursing course before you leave school. Therefore, we are going to be very brief concerning child care, and we will not try to cover home nursing in this unit.

## INFANT CARE

### FEEDING THE BABY

The baby grows fast during his first two years. During the first seven or eight months mother's milk is the best food. However, safe methods for bottle feeding are now used and the baby can be fed so that he develops normally and will be healthy and strong. Your doctor will decide if bottle feeding is necessary and prescribe a formula.

Wash bottles, nipples and bottle covers in hot soapy water. Rinse throroughly in clear hot water.

To sterilize the equipment for making baby's formula cover all utensils and bottle covers with water and boil 10 minutes. Boil the nipples for 5 minutes in a separate pan. Store in covered sterilized jar.

Handle sterilized nipples by the rim only.

Before giving bottles to baby, stand in hot water for a few minutes to warm. Test the temperature of the furmula by allowing a drop to fall on the inside of the wrist. It should feel lukewarm.

Hold baby in mother's arms during feeding. Hold the bottle to keep the neck full of milk

Never leave the baby with bottle propped up.

Several times during the feeding and after the feeding, hold the baby against your shoulder and pat gently on the back to get up air bubbles.

Supplementary Foods

Additional foods are added to the baby's diet at the recommendation of the doctor or clinic. The baby should be eating the following foods every day by the end of the first year

| | |
|---|---|
| milk | toast |
| fruit | cereal |
| vegetables | eggs |
| potatoes | meat,fish,poultry |

Give new foods in amounts of not more than one teaspoon at first. Offer the new food at a later date if the baby refuses it.

### SIGNS OF HEALTH IN A BABY

| | |
|---|---|
| good appetite | sleeps soundly |
| bright eyes | is active |
| clear skin | cries little |
| regular bowel movements | |

### KEEPING BABY SAFE

Keep matches in metal container and out of baby's reach.
Keep medicines in high cabinet.
Put medicines back as soon as used.
Never leave baby alone in house while you go on errands.
Never leave baby in care of young children.
Never leave baby alone in bath tub.
Never leave baby alone in room with lighted gas stove or open fire.
Remind older children to keep scissors, knives,pins and other small or dangerous articles out of baby's reach.

Keep pail, pan or tubs of water off the floor. Turn handle of cooking utensils away from the front of the stove.

Visit your doctor or well baby clinic regularly. Have your baby examined every three months.

## CHILD CARE: TWO TO SIX

**BATH**

A child has fun with soap and water. Teach the child to wash the parts of his body which are easily reached while in the tub. Provide a box or stool on which to stand to reach the wash-bowl. Teach him to wash his hands before meals and after going to the toilet. Give him time, but do not let him "play".

**CLOTHES**

Select clothes which are easy for the child to handle -such as zippers and front openings. Patiently teach the child to put on one article, such as socks, then another such as shoes, etc. Give him time, encouragement and guidance for self-help. Provide low hooks and shelves in a closet for the child to hang up and put away his own clothes and shoes. This helps you and makes him feel grown up.

**TOILET**

Do not overemphasize or fret about toilet training, but give the child an opportunity to learn. Each child differs in this ability, but training is usually accomplished between 2 and 3 years of age. Bowel control comes before bladder control. Patience and regularity are most important for the mother to remember. Do not try to train for bladder control until the child is walking.

**REST**

A nap or rest is necessary for every child in the afternoon. A quiet period or rest is advisable before the noon meal. A definite bedtime hour should be followed. Prepare the child for sleep by reading or talking to him. A child needs 12 hours sleep.

**FOOD**

Make mealtime a happy time. Serve meals at regular hours. It is advisable to have the main meal in the middle of the day for the young child. Serve small portions. It is better to have the child ask for seconds than to be discouraged with too much on his plate.

Serve the following foods every day:

- Milk - 3 to 4 glasses
- Vegetables -potato and 2 green or yellow vegetables
- Fruits -citrus or tomato, and 2 other fruits
- Eggs - 1 a day or 5 a week
- Meat, cheese, fish, fowl-1 or more servings a day.

- Cereal and bread - 2 or more servings daily.
- Butter or margarine - 2 or more teaspoons daily.
- Avoid highly seasoned foods, tea, coffee, fried foods, pastries, green pepper, corn relishes.

## THE EMOTIONAL NEEDS OF A YOUNG CHILD

Love, security, and acceptance by his parents.
Guidance by a person that he loves.
A pattern by which to grow (adults show the way).
A feeling that he is important and needed.
A feeling of success and achievement.
A feeling that he has a place among his friends.

## SUGGESTIONS FOR THE PARENT:

Visits to well-baby clinics help mothers keep pre-school children well by following their growth and development.
Introduce the child to the dentist before the 3rd. year.
Discipline the child when needed. There are times to say "no" and stick to it. Children need firmness.
Punishment (when used) should be given right away. Act without argument. Be patient and consistent.
Answers to questions should be clear, simple and truthful.
Avoid baby talk. Use short words. Be a willing listener.

## KNOW YOUR CHILD:

2 yrs. -Age of discovery and curiosity. A child needs to handle, smell, taste, investigate.
3 yrs. -Age of imitation, a child likes to help adults and learn this way.
4 yrs. -Age of make-believe. A child likes to build and make things.
5 yrs.-Age of achievement. The child learns to play with others.
6 yrs. -Age of group activity. School begins. Take an interest in his school and see his teacher.

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Division of School Extension and Home Economics School District of Philadelphia by Baltimore City Department of Public Welfare Home Economist

AGED PERSONS IN THE HOME

You are all very young. When one is young it is very difficult to understand and sympathize with the problems of older persons. If you have a grandmother, grandfather, greatgrandmother, or great-grandfather in your home, or perhaps your mother's or father's aunt or uncle in the home, you know that these older persons usually require some special attention.

How many have aged persons in the home?

At what age do you consider a person old?

Many older persons require more rest than young adults and like a quiet place to nap during the day. Some cannot eat all the regular foods served at mealtime, but must have special diets and soft foods. Still others may have chronic ailments, such as arthritis, heart disease, or high or low blood pressure.

What can you do to help the aged person in your home?

The greatest contribution you can make is to be thoughtful. Be quiet when they are asleep. Be ready to run errands for them. Take the time to talk with them. Many older people are lonely but will not admit it. Invite them to see a movie or take a little walk. If they like to read, see that you get library books for them. When they are ill, offer to help your mother in any way possible in caring for them.

Girls can help older persons sew, wash, and iron. Both boys and girls can be kind and make older persons happier by their thoughtfulness.

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In this unit we have tried to have you learn that love and respect are important to good family relationships. We have studied about the duties of boys and girls as family members. You have, I hope, learned more about food, clothing, and shelter. We have stressed the importance of cleanliness, and touched briefly on child care and care of the aged. Learning about these things in school is fine. However, if you do not try to do these things at home then what you know will be worthless. How many boys and girls will really try to practice some of the things we have studied? Remember, I am going to have a chart. Each name will be on it. You are free to place beside your name -- for the next month -- anything that you did at home which helped your family have a better home life.

## Transportation

I. Understandings
   A. People depend upon transportation for the necessities of life.
   B. Transportation provides work for many people.
   C. Improvement in world prosperity is dependent on transportation.
   D. Transportation is dependent upon human and natural resources.
   E. Transportation has become more diversified, faster, and safer through the years.

II. Motivating Activities
   A. Bulletin board display - "Transportation - Now - Then"
   B. Exhibit - model airplanes, trains, boats.
   C. Current news articles involving transportation
   D. Fs 2521 - "American Transportation" - (Horseback to Jet)

III. References
   A. Cain, Wilma, Story of America, - Transportation, The Fideler Co., 1957
   B. Devereaux, V., America's Own Story, Harr Wagner, San Francisco, 1960
   C. Dowling, et al: The New Understanding Why, John S. Winston Co., Phila, 1957
   D. Eibling, H., et al: Our Country's Story, Laidlaw, Summit, N.J., 1961
   E. Fraser-Hoy, Our Community, American Book, N.Y., 1961
   F. Fraser-Hoy, Our State, American Book, N.Y., 1961
   G. Provus, et al: How We Travel on Land, Benefic Press, 1900 N. Narragansett, Chicago 39, Ill., 1962
   H. Provus, et al: How We Travel on Water, Benefic Press, 1900 N. Narragansett, Chicago 39, Ill., 1962
   I. Thorn, Edward L., Popular Mechanics' Picture History of American Transportation, 1952, (JTH-203-T4)

How many of you came to school on the bus this morning? How many of you came by automobile? How many walked? Would you like to have lived when there were no buses, no automobiles, and no sidewalks? How did people go from place to place then?

Moving people and goods from place to place was one of the most difficult problems faced by early settlers in America. Dense forests surrounded the clearings they made to build their homes on. Wild beasts roamed in the shadows of the giant trees. Strange reptiles slithered through the underbrush. In this setting the pioneers along the eastern seaboard huddled. It was many years before they dared to venture far from their little clearings. When they did, they followed the Indian footpaths and trails. Where traffic was heavy these narrow paths were often more than a foot deep.

Did you know that right here in your own city and state there are many present-day roads and highways which follow the ancient trails first made by the early settlers and pioneers? According to an old legend, Charles Street was once an Indian trail. Crooked Lane, in the vicinity of Charles and Lexington Streets was once a part of the Great Eastern Highway. When the Charles Center Project eliminated Crooked Lane, a tablet was placed on the site to commemorate its historic significance. Rolling Road near Catonsville was so named because early settlers rolled barrels of produce along this route.

Just as the pioneers followed in the footsteps of the Indians on land, they discovered as the Indians had done, that travel by water was faster and easier. There were fine water ways along the coast, rivers, bays, and lakes. Some of these we now know as the Susquehanna and the Hudson Rivers; the Chesapeake, Delaware, and Hudson Bays, and the Great Lakes.

Directed Reading:
Continental Press - "Let Us Travel" - Sheets 1 through 20

Provus, et al: How We Travel on Land, Benefic Press, Chicago, Ill., 1962

Show: "American Transportation" - Fs 2521

Begin an illustrated Time Line and/or a series of dioramas depicting progress in transportation by land and water.

How We Travel on Water, Provus, et al: Benefic Press, 1900 N, Narragansett, Chicago 39, Ill.

Map Study. Locate important water ways.

The Indians used canoes to travel over these water ways. They were made of the bark from birch trees. Long strips of bark were carefully peeled from the trees and sewed together with thin roots. Then wooden strips were cut to make a frame. The birch bark was fastened to the frame with roots. Hot "pitch" was poured over the seams to make the canoe water-tight.

In other parts of America where there were no birch trees the Indians used dugout canoes. These were made of logs about thirty feet long and three feet thick. The inside of the log was burned out and then scraped smooth with shells and stones.

Early colonists used both the birch-bark canoe and the dugout canoe. However, because the birch-bark canoes were so light the colonist found them difficult to handle; consequently, they preferred the dugout.

Nine years after the colonists came to America they began to erect shipyards along the coast. At first only small, fishing boats with one mast were built here. Later boats with two masts and two large sails were constructed. These were called schooners.

When the Spanish explorers came to America, they brought a new way of travel on land, the horse. By the end of the 17th century the horse was used by all the settlers not only to carry people, but to haul supplies and carry mail. The men who carried the mail were called post riders because they changed horses at various "posts" along the route.

The roads used by the post riders and later by stage coaches were called post roads. The places where mail was left by the post riders for distribution were called post offices.

Bring in samples.of birch bark.
Make a canoe.

Story of America Transportation, Cain, Wilma, The Fideler Co., 1959

Make a model of a dugout canoe using
clay
balsa wood
cardboard
soap

Visit a shipyard.

Assemble schooner from model kit or carve from wood or soap.
Draw pictures of early boats.

Collect pictures of early boats; label and/or write a few descriptive sentences. Compile for booklet.

Begin booklets on transportation.

The Indians devised an ingenious method of using the horse to transport their household goods. Two poles were placed on either side of the horse to support a platform of branches. Goods were piled on top of the branches. This vehicle was known as a Travois.

Make a model of the Travois.

The colonists put pack saddles on their horses. The forests were combed for fork-shaped limbs which would fit the horse's back. Bundles or padding were tied to the saddles. A good pack horse could carry two or three hundred pounds. Often a string of horses traveled behind a lead horse; each wearing a bell so that he could be easily located should he stray. Armed men rode along side to protect the train of horses. This method of transportation was called the Pack Train.

Make a diorama showing men traveling by pack train.

Farmers used oxen and carts to transport goods. The wheels were hewn from logs.

Model oxen of clay; make simple cart.

Through the years land travel was constantly improved. Trails were widened; new roads were cut through the forests. When it rained, however, they became rivers of mud. The colonists tried laying logs side by side across the road. This helped, but riding over them was so bumpy, they were called "corduroy roads".

Directed Reading:
America's Own Story, Devereaux, Harr Wagner, San Francisco, 1960

John McAdam made a road by spreading broken stone and gravel on a roadbed. Water was sprinkled over the stone. As vehicles passed over the road they helped to pack the stone down. This hard finish was called macadam.

Directed Reading:
Dowling, et al: The New Understanding Why, pp. 133-137, John C. Winston Co., 1957

About 1795 a road was laid in Pennsylvania between Philadelphia and Lancaster. It cost a great deal of money so people were charged for its use. Each traveler stopped at a little house by a pole or pike to pay his money or toll. When the money was paid, the collector turned the pike so the traveler could go on.

Directed Reading: Our Country's Story, p. 285

Trace road between Philadelphia and Lancaster on map.

Make a diorama of first toll road.

Today we have many toll roads which we call turnpikes.

Have you ever traveled on the famous New Jersey Turnpike which begins in Delaware and ends in New York? or, the Pennsylvania Turnpike which goes westward? or, the Merritt Parkway that begins in New York and goes east to the New England states?

Today we have toll bridges and tunnels, too. Bay Bridge and the Susquehanna Bridge in our own state are toll bridges. The Baltimore Harbor Tunnel which begins in east Baltimore is a toll tunnel right in the heart of our city. The Holland Tunnel and the Lincoln Tunnel in New York City are famous throughout the world. These are toll tunnels, too.

Soon the pioneers constructed huge covered wagons to haul families and heavy loads over the roads and turnpikes. They were called Conestoga wagons because the first ones were built in Conestoga, Pennsylvania. These wagons were usually pulled by four to six horses and could haul loads weighing six tons. The wheels of these wagons were broad to keep them from sinking in the mud easily. The body of the wagon was water-proof and could be floated across a stream. The floor of the wagon curved up at both ends to keep goods from sliding back and forth. A white canvas cover was stretched across the top of the wagon to protect the interior from snow or rain and to provide a home-on-wheels for the pioneers. What do you see on the roads today that is a home-on-wheels? The underside of the wagons were painted blue; the side boards, a vivid red.

Since there were few roads west of the Appalachian Mountains before the Revolutionary War, pioneers used boats to reach these regions. Flatboats were most commonly used. These were of different sizes. They looked like huge, floating boxes. They were steered with long oars called sweeps. The sweeps were as long as the boats.

Make a chart comparing the different roads.
corduroy roads
post roads
turnpikes
macadam

Assemble Conestoga wagon from model kit or construct from cardboard boxes.

Have pupils color dittoed picture of a conestoga wagon.

Make model flatboats.

Flatboats were like floating homes for the early settlers. Sometimes families lived on them for weeks as they traveled down stream. Indians and river pirates often attacked the flatboats. For this reason several usually traveled together.

Settlers along the Ohio and Mississippi rivers shipped grain, flour, tobacco and furs on flatboats. At the end of the journey down the rivers, the boats were taken apart to pole them upstream.

River travel was difficult at times. When there were rapids or waterfalls in the river, cargo had to be unloaded, hauled around the rapids, and loaded on another boat. To overcome this difficulty, short canals were dug around some of the rapids and waterfalls. Canal locks were used to lower or raise boats as they passed from one waterway to another.

The passenger boats that traveled on the canals were called packets. Packets had a main cabin which was used as a dining room by day and a men's dormitory at night. There was a room for women passengers. At first, two horses were hitched to the boats' towline to pull it through the canal waters. The horses walked on a path alongside the water. This was called a towpath. Barges were used in the same manner to carry loads. Later packets were powered by steam.

Larger ships called packet liners carried passengers and freight to Europe as early as 1816. A trip to England took about twenty days.

Later the beautiful clipper ships were designed. These could travel halfway around the world in three months. The clipper ships had three masts which reached two hundred feet above the water. The sails stretched almost to the top of the masts. The bow was sharply pointed and was usually painted black; the hull was long and slender. In the rush to find gold in California many people sailed on clipper ships.

Locate Ohio and Mississippi areas on map.

Show pictures of rapids, waterfalls, and canals. Discuss characteristics of each; difficulties presented by rapids, waterfalls.

Locate some important canals on the map.

Show: "Tow-Path Boy" - Fs 665

Trip to "Great Falls" - (near Washington, D.C.)

Draw clipper ships.

Clippers could make the trip in about half the time taken by wagons traveling overland.

Soon after the advent of the clipper ships, schooners were built in American shipyards. The first schooners had only three masts, but it was not long before very large ships were launched. The largest had seven masts and was built in 1902. Schooners were used to transport coal, sugar, stone, cotton, and other bulky cargoes.

The first boat driven by steam was designed by Robert Fulton in 1807. This, however, was not the first steamship built in America. John Fitch built the first steamboat in 1786 and others later. However, none of his boats was successful. Robert Fulton borrowed some of John Fitch's ideas and launched the Clermont in the Hudson River on August 17, 1807. The Clermont had a thirty-foot smoke stack, and huge paddle wheels on either side. As the fire burned, clouds of smoke came from the smoke stack, the boiling water steamed and started the movement of the paddle wheels. The paddle wheels churned the river water and propelled the boat upstream.

The steamboats soon became floating palaces. Beautiful glass chandeliers hung from the ceilings of some rooms and the floors were covered with thick carpeting. The woodwork on the outside was carved in fancy designs and painted white and gold. They carried passengers and cargo. While travel by water was improving travel by land was not at a standstill. Rails were laid and cars were pulled along the tracks by horses.

Following the days of the stagecoach, after the discovery of steam as a source of power, steam engines replaced the horses. The "DeWitt Clinton" was one of the first steam locomotives in America. Its speed reached 30 miles an hour.

The "Tom Thumb" was another early steam locomotive.

Begin frieze, "Transportation - Then and Now"
or
"From Canoe to Steamboat"
or
"Story of Land and Water Travel"

Experiment to note behavior of steam.

Assemble models of early trains.
Make models from cardboard boxes.

It made its trial run on the first American railroad built to carry passengers, the Baltimore and Ohio. Its tracks were only thirteen miles long and extended from Baltimore to Ellicott Mills. The Tom Thumb is best remembered for its race with a horse-drawn railroad car. The little engine led until engine trouble caused it to lose speed. The first railroad cars were really stagecoaches. These were improved gradually. The new coaches were long and box like, with a door at each end. There was a narrow aisle down the center of the car. Wooden benches were placed lengthwise on either side of the aisle. In the center there was a large, wood-burning stove. The heating was very unsatisfactory.

Eventually railroads joined the east and the west. Congress gave two companies the right to build the railroad and promised each ten square miles of land along the track for every mile of track they laid. The two companies were the Central Pacific and the Union Pacific. The Central Pacific began to lay tracks eastward from Sacramento; the Union Pacific, westward from Omaha, Nebraska. The workers faced many difficulties, building tunnels through mountains, bridges over streams, and fighting unfriendly Indians. The tracks met at Promontory Point, Utah, May 10, 1869.

This first cross-country railroad made settlement of the West easier. Trains were faster and safer than covered wagons. Trade between the East and West increased.

Today stream-lined trains travel over the same route. Diesel-electric locomotives now pull the cars swiftly over the tracks. There are sleeping cars, diners, and observation cars among the coaches of the passenger trains. More important to all of us are the modern freight trains which bring milk, fresh vegetables and fruits to city markets.

Visit B & O Station museum

Our Community, Fraser-Hoy, American Book Co., N.Y., 1961

Locate starting points of construction.

Railroad Transportation Fs 215

Make a Time Line showing early transportation by land.

Boats - Sd. 188.1
(modern transportation)

Travel by water kept pace with the improved land travel. Ships with huge, billowing sails, and paddle wheels powered by steam began to cross the ocean. The "Savannah" was the first of these. Later the sails were abandoned and ships depended solely on steam engines.

After many years of experimentation men found better ways of supplying power to engines. In the steam engine fuel (coal) had to be burned outside the engine. With the discovery of oils that burn new engines were developed. These burn gasolin or other fuel oils inside the engine. The famous Diesel engine burns oil. The engines in automobiles burn gasoline.

Today great ocean liners ply the oceans. Some are still powered by steam engines, but electric motors turn the large propellers which have replaced the paddle wheels. Liners now travel through the water at speeds as high as forty miles an hour. The liners are made of steel now and are so strong they can carry two thousand passengers. They are like floating hotels with several floors. They have swimming pools, shops, dining rooms, ballrooms, tennis courts, and suites of rooms for living quarters.

In 1903, man's dream to travel through the air like the birds came true. Wilbur and Orville Wright made the first flight in an airplane they had built. They took off at Kitty Hawk, N. Carolina and stayed in the air for 12 seconds.

Today planes are so powerful, flights can be made to all parts of the world. There are jet planes that attain speeds of more than 600 miles an hour. They can go around the world in forty hours.

As our country grew and cities and towns sprang up all over America, people sought ways to travel to work, to visit friends, or to find relaxation. Buses drawnby horses were the chief means of transportation at first.

The Passenger Liner Fs - 497

Seaway Travel Fs - 2556

The Wright Brothers Fs 2632
First Flight of Wright Brothers Sd 210.3
First Book of Airplanes, Benedick, D.C. Heath
How Airplanes Help Us, McCall, et al; Benefic Press

Airplanes and How They Fly Sd 924.1
Airplane Passenger Flight 376 Sd 360.2
How Airplanes Fly Fs 2052
How Do Jets Fly Fs 2636
Air Transportation - Jobs & You Fs 122

Then came the large street cars pulled over the rails by horses. Electric street cars replaced the horse-drawn cars late in the nineteenth century. Electric power traveled from a trolley attached to overhead cables to the motor of the car.

As streets became more crowded some cities built railroads above the streets: others built underground railways. Elevated trains and subways are still in use. In recent years, the street cars have been replaced by motor buses.

In 1816 the bicycle was invented. It was called a 'hobbyhorse' because the rider's feet touched the ground as he sat astride the seat. He had to move the bike forward by walking. Two huge pedals were attached to the bike about twenty years later. Some bicycles were built for two.

After 1900, people lost interest in the bicycle because of the invention of the automobile. Steam and electricity were used to drive these at first. Then the Duryea brothers built a gasoline-driven automobile. Henry Ford designed the 'Tin Lizzie' in 1908. It could run 22 miles on a gallon of gas at speeds up to 40 miles an hour. Tin Lizzie was only a nick-name for the automobile. It is more often referred to as the Model T Ford. It cost eight hundred dollars. In a few years the price dropped to less than four hundred; millions were sold.

In the 1920's, the appearance of automobiles began to change. They are now lower and longer and faster than the early models.

The improvement of all ways of travel has made life very different. Travel is swift, comfortable, and relatively safe. As a result of the increased speed in all modes of transportation the size of the world has diminished to a point that makes every man your next door neighbor. You can now fly to the most distant part of the earth in a matter of hours.

Transportation in the City Fs 578

Reading Activity: Dowling, et al: New Understanding Why, pp. 142-158, John C. Winston Co., 1957, Phila.

Begin freize: Travel on City Streets - Then - Now

Write to: General Motors Corporation
General Motors Technical Center
Warren, Michigan
For: "Automobile Transportation Teaching Kit"

Informative Classroom Picture Publishers, Grand Rapids, Mich.

"American Transportation" 32 - plates - $3.95

This shortening of distances between countries and continents makes it imperative that people everywhere learn to respect each other and live together in peace.

## Baltimore: Its History and Landmarks

I. Understandings to be developed
   A. Baltimore is an old and historic city with numerous landmarks, each helping to recall its past history.
   B. The Chesapeake Bay played a major role in the growth and development of Baltimore City.
   C. The Baltimore Harbor is one of the best equipped ports in the world.
   D. Baltimore has played an important role in the wars of our country.
   E. Baltimore has made many economic and cultural contributions to our national heritage.
   F. Baltimore is internationally known for its many kinds of industries.

II. Motivating Activities
   A. Bulletin board display of historical landmarks of Baltimore.
   B. Film or filmstrip of Baltimore.
   C. Postal card display of scenes of Baltimore.
   D. Field trips
      1. Fort McHenry
      2. Tour of city's landmarks
      3. Enoch Pratt Library, Maryland Room
      4. Maryland Historical Society

III. References

Baltimore Association of Commerce, Baltimore, The National Anthem City (a visitors handbook)
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Bodine, Aubrey, et al, Guide to Baltimore and Annapolis, Baltimore, 1957
Department of Special Education, Baltimore an Interesting City, Baltimore Public Schools, 1955
Deussen, Elizabeth, Exploring Baltimore, Baltimore Public Schools, 1960
Kaessmann, Beta, et al, My Maryland, Maryland Historical Society, 1955
Silverman, Albert J., Baltimore City of Promise, H.G. Roebuck and Son, Baltimore, 1953
The Yellow Pages of the Telephone Directory - Chesapeake and Potomac Telephone Company, May 1964, Pages 2-3

Baltimore owes much of its success as a "big" city to its geographical location. It is located on the Eastern Seaboard. Can you find it on the map? Do you see a river, a bay, and an ocean nearby? Baltimore is near the Patapsco River, the Chesapeake Bay, and the Atlantic Ocean. It is the seventh largest city in the United States with a population of nearly one million people.

Distribute maps of Maryland. Locate Baltimore.

Baltimore's nearness to several large and important cities has helped in its rapid growth. See if you can locate Washington D.C., Philadelphia, and New York on your map. How far do you think Philadelphia is from Baltimore? New York? Washington? Trade with these cities has been easy because of their proximity.

Chart the following information.

| Name of city | Population |
|---|---|
| Baltimore | |
| Washington | |
| Philadelphia | |
| New York | |

Baltimore has excellent harbor facilities which afford not only cheap transportation but also easy access to any seaport in the world. Today the port of Baltimore has more than 270 piers and over 40 miles of water front serving ships from all over the world. Nearby are industrial plants, producing steel, copper, fertilizer and chemicals. Here ships are built, repaired and scrapped. The port is one of our most historical and interesting parts of Baltimore. The river and its branches have played a major role in the growth of Baltimore.

Distribute pamphlet "The Port of Baltimore" (may be obtained from the Port Authority Administration, Balto, Md.)

Baltimore is popularly known as the "monumental" city. Can you imagine how it got this name? Baltimore has many monuments and statues. Many of these are "firsts" dedicated to great events and famous people. You will hear more about these later.

Baltimore Sd 114.3
Your City Fs 292

Baltimore was not always a large city. In 1608, Captain John Smith was the first white man to see the region that is now Baltimore. As he sailed up the Chesapeake Bay he saw thickly wooded shores, sparkling waters, and Indians peering through the thickets. The first settler Mr. David Jones came in 1661 and made his home on the Eastern bank of a small stream which has been named for him, Jones Falls.

Begin a time line showing the growth of Baltimore.

(Fallsway now runs over this stream) Others joined David Jones and soon settlements grew up at the mouth of the stream. Settlers called it Jones Town.

By 1729 there were many plantations all along the Patapsco River. Despite all these small settlements there was no real town of Baltimore. In July of this same year these settlers joined together to form Baltimore town.

This new town grew and prospered. In 1745 it merged with Jones Town. In a few years, Fells Point and Whetstone Point (Locust Point) were also added making Baltimore the largest settlement in this area.

However, Baltimore and other colonies in America were not free and independent. They were loyal to the Mother Country, England. England required all colonies to pay taxes, in order to support the home government. After a time the colonies resented this. They wanted their own form of government and did not like to pay taxes to a government they had no part in. Feelings grew so bitter between England and the colonists that they went to war.

List causes of Revolutionary War.

Do you remember these famous words - "Listen my children and you shall hear the Midnight Ride of Paul Revere."

Study poem of Paul Revere's Ride.

Paul Revere had arranged with his friends to have signal lights in the tower of the North Church in Boston. They would tell how the British soldiers were coming."One if by land and two if by sea."

Around 10 P.M. on April 18, 1775, Paul Revere saw two lights shining in the Church tower. He knew the British were coming by sea. He quickly mounted his horse and sped toward Lexington and Concord shouting "The British are coming." Minute men from Concord to Lexington were alerted. When the British arrived at Lexington Green, the Americans were ready.

The fighting which took place in this encounter marked the beginning of the War of Independence in which Americans won the right to be free of the mother country, England.

Baltimore had an important role in this war. The "Wasp and the Hornet", the first American Navy ships, were fitted for war in the Baltimore Harbor. Baltimore prepared more privateers than any other seaport. Even the women played a part. They gathered supplies and made clothing for the soldiers.

Show pictures of early ships.

Did you know that Baltimore served as the capitol of the republic? You probably remember that the first Continental Congress met in Philadelphia and wrote the "Declaration of Independence". The second Continental Congress was also supposed to meet in Philadelphia. Many people, though, were afraid that Philadelphia would be captured by the British and decided to meet in Baltimore. This meeting was held in a building on the corner of Baltimore and Sharp Streets.

Display pictures of Continental Congress and Liberty Bell.

Following the Revolutionary War, the colonists gained their independence from England. They were free. Each colony had to help contribute to the growth and expansion of the republic. Much of the goods that formerly was purchased from England, was now manufactured in Baltimore. Iron works, small furniture shops, brick kilns, and flour mills began to spring up in various sections of the city. Many streets and roads were widened and paved. This helped improve transportation. A regular stage coach line was established and additional wharves were built. Civic-minded John Eager Howard developed what was the northwestern section of the city. He laid out Eutaw and Lexington Streets and set aside land for Lexington Market.

Locate Eutaw and Lexington Streets on the map. Find Lexington Market.

During this time, the Baltimore Police Department was created; street lamps were installed; houses were rapidly constructed; and ground rents were created.

On December 3, 1796 (although the seal of the city of Baltimore bears the date 1797), the Senate passed the Act of Incorporation. The act was signed by the Governor that same day. There were about twenty thousand people living in Baltimore City then and James Calhoun was elected their first Mayor.

Draw a picture of the seal of Baltimore.

Things went well for fifteen years. Then Baltimore became involved in another war. What is this war called? Yes, we call it The War of 1812. Again Baltimore played a leading role. No ships made better privateers than the famous Baltimore Clippers. These ships were slim, light, and low in the water. They had tall masts which carried many sails. They were the fastest ships on the sea.

Draw pictures of the Baltimore Clipper Ships.

At one point in the war, Baltimore was to be the target of the British attack. When the British came in sight of Baltimore can you imagine their surprise at seeing twelve thousand troops and many cannons on Hampstead Hill? What do you think happened? The English stopped and sent messages to their fleet for additional help but the fleet was having its own troubles. Then without even firing a single shot they retreated. Their attempted land attack on Baltimore failed.

Fort McHenry Ks 57

The British, however, were not ready to give up. They made new plans. They decided to bombard Fort McHenry.

Plan a visit to Fort McHenry.

Let's recall what happened. You recall that a lawyer named Francis Scott Key went out to the British fleet to arrange for the release of his good friend, Dr. Beanes.

Display pictorial post cards of Fort McHenry.

Mr. Key was treated kindly and after a brief meeting, Dr. Beanes and Mr. Key were transferred to the American vessel and remained with the British fleet.

All night Key paced up and down the deck. He kept a watchful eye on the flag which Mary Pickersgill had made, that flew over the fort.

A little after midnight, a few British ships successfully slipped past the guns of Fort McHenry. An alert American guard, however, heard faint sounds and saw dim lights. He immediately sounded the alarm. The guns of Fort McHenry, Fort Covington, and the City Batteries all fired at the British. One barge was sunk and again the British retreated.

Draw pictures of scenes from the War of 1812.

The continuous bursting of bombs in the air gave Francis Scott Key a good view of the fort. He still saw the American flag. This inspired him to write a beautiful poem, The Star Spangled Banner. On March 4, 1931 this poem became the National Anthem of the United States.

Study the words and meaning of the National Anthem.

The house that Mary Pickersgill lived in has been restored to its 1814 appearance. It is now called the Flag House. The Flag House is at Pratt and Albemarle Streets. It is one of the five places in the United States where the flag is permitted to fly twenty-four hours a day. Can you guess the other places? (Fort McHenry, Flag House, Capitol of the United States, Tomb of Francis Scott Key, War Memorial in Worcester, Mass.)

Visit the Flag House.

Fort McHenry has also been preserved and restored as a national shrine. A new National Park Service Visitors Center has been built. This one story brick structure north of the fort was built at a cost of $130,000. A 13 minute color film is shown each hour on the hour from 10 A.M. to 4 P.M. weekdays and every half hour on weekends. The film which recounts the fort's history and its defense is shown in the 93 seat auditorium. There are many inspirational exhibits displayed in the visitors center.

Star Spangled Banner Fs 639

More than fifty years ago, a monument honoring Key was built at Eutaw Place and Lanvale Street. It is the Francis Scott Key Monument. It shows Mr. Key standing in an open boat offering the words of the Star Spangled Banner to Colombia, the figure at the top of the monument.

Historical Baltimore Ks 58

Did you know that on July 4, 1815, the cornerstone of the first formal monument in honor of George Washington was placed at Mt. Vernon Place and Charles Street? It took nine years to complete it. On top of the monument is a sixteen foot statue of George Washington. If you visit the monument you can see many documents and papers written by George Washington. The pavement around the monument is painted red, white, and blue.

Visit famous landmarks.
George Washington Monument
Francis Scott Key Monument
Shot Tower

Construct a model of the shot tower.

The Shot Tower at Fayette and Front Streets is one of the few remaining shot towers in the country. It was built in 1828. Why is it called the Shot Tower? Yes, shot and ammunition were made in the tower. The Tower is 234 feet high. Molten lead was poured through a sieve at the top. When the lead fell into the tank at the base, it hardened.

Collect postal cards of famous landmarks.

Many of you have visited some of the famous Baltimore landmarks which were established before the Civil War. Have you visited any of these: Chesapeake and Delaware Canal, Peale Museum, Maryland Historical Society; Mount Clare Railroad Station; Peabody Institute; and Druid Hill Park.

The Civil War of 1860 placed Baltimore in a strange position. Since Baltimore was midway between North and South, she was divided in her sympathies. Some Baltimoreans favored the North, others the South. In many cases families were split in their loyalties - brothers found themselves joining opposing armies. Maryland, though, remained with the union. During this war, Baltimore was called 'Mobtown'. Why do you think it got this name? It was because mobs of people crowded in the streets and threw stones at the union troops whenever they marched through the city.

Exhibit pictures of the Civil War.

While Baltimore flourished, the South was still crippled from the war. Consequently, hundreds of Southerners sought work in Baltimore. Many of these were freed slaves.

Since Baltimore was so close to the nation's capitol, many of the Union armies' war needs were provided by Baltimore's industries. This increased job opportunities for those who sought them.

The era following the war was one of great cultural advancement. The "merchant Princes" were prominent at this time. Four merchants who contributed to the city's commercial and cultural development were: George Peabody, Enoch Pratt, George Walters and Johns Hopkins. Their establishments (Peabody Conservatory, Enoch Pratt Free Library, Walters Art Gallery, and Johns Hopkins University) have improved the cultural backgrounds of their many visitors.

Discuss the educational and cultural value:
Peabody Conservatory
Enoch Pratt Free Library
Walters Art Gallery
Johns Hopkins University
Johns Hopkins Hospital

The story is told that Mr. Johns Hopkins believed there were two things that would last forever: a university, because there will always be youth; and a hospital because there will always be suffering." When he died on Christmas Eve 1873, at the age of 78, he left a large sum of money to be used for a university and a hospital. He left seven million dollars, $3,500,000 for the university and $3,500,000 for the hospital. I'm sure you can name these two buildings. The Johns Hopkins University and The Johns Hopkins Hospital.

The University opened in 1876 and the Hospital in 1889.

In 1868 disaster struck as Baltimore was covered by flood waters. Heavy rainfall filled the banks of Jones Falls flooding the older parts of town and rising in some places to a height of twelve feet. Bridges, homes, wagons, and street cars were washed away. Not until several days later was the city free from the threat of flood waters.

Discuss disastrous effects of a flood.

During the ten year period from 1870-1880, the streets of Baltimore were crowded with horse-drawn vehicles and the factories hummed with activity again. The value of Baltimore's industrial products increased.

On February 7, 1904 Baltimore's worst fire broke out. It was called The Great Baltimore Fire. At that time, Baltimore did not have the kind of fire-fighting equipment we have today. They did not have enough equipment to cope with the fire. Messages had to be sent to other cities requesting additional fire-fighting equipment.

When the fire was finally extinguished, the damage was great. About seventy-three blocks containing some fifteen hundred buildings were completely destroyed. Can you imagine how many miles of land this fire ruined? Yes, about eight miles.

Though saddened by this tragic fire, the citizens of Baltimore were determined to rebuild the inner city. With the police and militia standing by to guard the ruins, the work of construction began. The city appointed a Burnt District Commission to plan and carry out the rebuilding progress.

Aid was given to those in need from money appropriated by the State. Roads were widened, new buildings were constructed, a modern sewage system was built, and enlarged water supply facilities were installed. These and other improvements were to make a greater Baltimore of the city that lay partly in ashes.

By the time of World War I, Baltimore was a great industrial and shipping center. The war stimulated trade and industry. From Baltimore's factories flowed vital munitions, chemicals, and other war goods. The Bethlehem Steel Corporation plant at Sparrows Point expanded enormously. New piers and grain elevators were built.

Compare early and modern fire-fighting equipment.

Picture display showing early scenes and later scenes of Baltimore.

Plan a tour of Baltimore Industries.

Today, it is the largest tidewater steel plant in the world.

After the war, Baltimore returned to a normal way of life, however, there had been numerous improvements in business and living conditions.

During the 'Roaring Twenties", Baltimore shared in the nation's prosperity. Industry expanded, homebuilding and real estate increased and local citizens took an interest in the stock market. For a time civic improvements kept pace with these developments.

The Baltimore Memorial Stadium was completed in 1922 in time for the Army - Navy football game of that year.

On Armistice Day - November 17, 1928, the War Memorial was dedicated. It is located across from City Hall. This plaza attracts many visitors and sight-seers.

Have pupils collect pictures and make booklets on Baltimore Then and Now or Monuments in Baltimore. (picture post cards may be used)

Discuss significance of the stadium's name being changed to BABE RUTH MEMORIAL STADIUM.

Discuss various uses of the Baltimore Memorial Stadium.

| | |
|---|---|
| baseball | Easter Sunrise Services |
| football | July 4, fireworks display |

A new main branch of the Enoch Pratt Free Library at Franklin and Mulberry Streets was opened in 1933. The main library provides many services that you should know about. They have rooms where you can read newspapers or magazines. They also have listening rooms where you can use earphones and hear musical records or albums. Can you name other services of the library? There are twenty-six branches throughout the city. The library also has a traveling mobile unit which brings books to various sections of the city making it convenient for people to borrow or return books.

Visit either the main branch or any branch of the Enoch Pratt Free Library.

Discuss significance of the stadium's name being changed to BABE RUTH MEMORIAL STADIUM.

With the outbreak of World War II, Baltimore again became an arsenal of defense. In order to gear for war production, industrial plants sprang up all over the city. Thousands of tons of war materials were shipped from Baltimore harbor and production records were broken in shipbuilding, aircraft manufacturing and other industries.

Have pupils plan a time line on a specific phase of the growth & development of transportation in Baltimore - the role of Baltimore in the wars fought in this country - the industrial growth of the city - etc.

The hardships of war were borne cheerfully by Baltimoreans. Gasoline, meat, butter, sugar and fuel were scarce. Many necessary items were rationed - that means they were hard to get. People were given ration coupons to buy a limited amount of gasoline, meat, sugar and other items.

Since World War II, the city has increased in population and in its economic activities. Baltimore has new horizons and bigger goals. New buildings are going up and old landmarks are coming down.

The new civic center has brought many attractions to Baltimore. It provides a "home" for the Baltimore Clippers,ice-hockey team and the Baltimore Bullets, basketball team.

How many of you have been to the Civic Center? What have you seen?

The future holds great promise for Baltimore's progress, but at the same time it means the destruction of many old and historic landmarks. The construction of the $127,000,000 Charles Street Complex spells the doom for Crooked Lane located behind the former O'neil Department Store. This lane in early Baltimore history once marked a part of the Northwest boundary of Baltimore Town of 1730.

Although many of the famous Baltimore landmarks will go with the wrecker's bulldozer and ball, they will be enshrined in the hearts of the older generation and pictured in texts for generations to come.

The Baltimore Plan Sd 290.2
Living in Baltimore City Ps 119

List various attractions to the Civic Center:

| | |
|---|---|
| rodeo | ice-capades |
| circus | teacher's convention |

Monuments

I. Christopher Columbus

A. Historical Significance

1. Given to City by people of Italian descent 1892

2. Commemorates fourth century of his discovery of America

B. Location

1. In Druid Hill Park

II. Cecil Calvert

A. Historical Significance

1. Commemorates Second Lord Proprietory of Maryland (1623-1675)

2. Was champion of freedom of religious worship

3. Was champion of separation of church and state

B. Location

1. On steps of Court House

III. Francis Scott Key

A. Historical Significance

1. Unveiled in 1911 for author of Star Spangled Banner

B. Locations

1. Eutaw Place and Lanvale Street

2. Fort McHenry

IV. Union Sailors and Soldiers

A. Historical Significance

1. Unveiled in 1909

2. Commemorates Marylanders who served in the Union Army

B. Location

1. Mt. Royal entrance to Druid Hill Park

V. Confederate Soldiers and Sailors

A. Historical Significance

1. Unveiled in 1903 by Daughters of Confederacy

2. Commemorates those who served the Confederacy

B. Location

1. Mt. Royal Avenue and Mosher Street

VI. Battle Monument

A. Historical Significance

1. Cornerstone laid in September 1815

2. Completed in 1825

3. Dedicated to those killed at Fort McHenry and North Point

4. Adopted as City Seal in 1827

B. Location

1. Calvert and Fayette Streets

VII. George Washington

A. Historical Significance

1. First monument begun in honor of Washington

2. Cornerstone laid July 4, 1815 and completed in 1829 -- The tower is 204 feet topped by the 16 foot figure of Washington

3. Earned Baltimore the title, "Monumental City"

VIII. Wells and McComas

A. Historical Significance

1. Commemorates bravery of two American soldiers

2. Believed they killed the British General Ross at North Point

3. Cornerstone laid in 1850 and completed in 1873

B. Location

1. Gay and Monument Streets

(For a complete listing of Baltimore landmarks and places of interest see Second Year Guide pp. 152-163)

UNIT: Geography Review

I. Understandings

A. Explorers and travelers were the first map makers.

B. Man uses a system of measuring which enables him to give the exact location of places on globes, charts, and maps.

C. There are vast environmental differences which largely determine how people live.

D. The physical features of the earth consist of a variety of land and water forms.

E. The atmosphere has an effect on the earth's surface.

F. Man can change the physical features of the land.

G. Man's many activities have a direct impact on the geography of the world.

II. Motivating Activities

A. Bulletin Board Display
1. Pictures showing the physical features of specific regions of the world.
2. A variety of different kinds of maps.

B. Skillful questioning
1. Discussion of satellites and space travel.

C. Films and Filmstrips
1. FS 1381 AMERICA IS DISCOVERED

D. Read or tell a story of a famous explorer - Christopher Columbus - Admiral Byrd

III. Teacher's References

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IV. Pupil References

Anderzhoin, M.L., Steps in Map Reading, New York, Rand McNally & Company, 1960.

Barrows, Parker, Sorenson, The American Continents, New York, Silver Burdette, 1959.

Borchert, John; McGivgan, J., Geography of the United States and Canada, New York, Rand McNally and Co., 1961

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Harna, etal; Cross Country Bk. IV New York, Scott, Foresman 1950.

Palmer, R.R., Atlas of World History, New York, Rand McNally & Company, 1957.

Still and Hatch, Journeys Through the Americas, New York, Allyn and Bacon, 1951.

Townsend, Herbert, Our Wonderful Earth, New York, Allyn and Bacon 1951.

V. Free Materials

Brochures, calendars, and maps from all major airlines, railroad and steamship companies.

GEOGRAPHY REVIEW

Geography is the study of the earth, its natural features, its resources, the people and the ways in which the people use the earth. Of all the subjects studied, geography is perhaps the one most intimately related to man's life. Everywhere man looks, he sees natural geographic features and signs of how man uses the land on which he lives.

Early explorers traveled over the great land and sea masses of this earth. Continents, rivers, oceans, and many other kinds of land and water forms were discovered. Maps were made of these discoveries. Some of these maps were studied and used by Christopher Columbus when he decided to

America is Discovered
FS. 1381

find a route to India. You can see what a very important part maps, charts and globes played in the age of exploration and discovery and why they are so important to us today.

## The Tools of Geography

The tools of geography include globes and maps; relief models and climatic charts.

## Globes

The globe is a reproduction of the entire earth of such a size, (or scale), that one can see it, handle it, and understand it, all at one time. It shows the true shape of the earth, oceans, and continents. It enables one to make accurate size comparisons - the size of Africa compared to that of North America or the size of Europe compared to that of Australia.

## Early and Modern Globes

The Greeks were the first to reproduce the earth in the form of a globe. The earliest globe was probably made by Crates about the year 150 B.C. It showed the known world which lay along the shores of the Mediterranean Sea and extended into Southern Asia. It also showed three other continents which were drawn in to balance the globe.

In 1492 Martin Behaim constructed a globe which is the oldest globe in existence today. It is in the Germania Museum in Nuremberg, Germany. It does not show the Americas as we know them today. Years later, globes were constructed to show the major facts of land and water distribution.

Modern globes are models of the world as it is known today. Man, however, knows much more of the world than can be on the surface of a globe of any reasonable and useful size shown.

## Films and Filmstrips

Maps, Globes, and Graphs
FS. 1407

Use the opaque projector.
Project different views of the globe.
Locate North America on the globe.

Make a globe. Use paper maché, plasticene or clay.
Outline continents and oceans - Label.

## Maps

### Definition

Our modern term map is derived from the Latin word mappa. This word signifies napkin, or cover cloth, in the sense of tablecloth. Just as a cloth covers a table so does a map provide coverage for the earth or any of its parts. By studying a map, one may tell what covers the earth's surface. By definition, a map is a representation of all, or a portion of the earth, drawn to scale.

### Use

Maps have been made for more than four thousand years and are made in greater numbers today than ever before. Maps and globes are really tools for different jobs; therefore, different kinds of maps are used to help us learn many things about the world around us. Some of the kinds of maps used are landscape, land-use, physical-political, metropolitan area, globe, road, and miscellaneous.

City officials use maps all the time. The mayor may use several. Some of these show where the city's schools are located, where buildings are going up and where streets and bridges are closed for repairs. A fire chief marks the location of fires on his map. A police chief uses a map to solve every day traffic jams. Airplane traffic managers use maps to keep track of the planes leaving and approaching their fields. Plane pilots follow courses marked on maps. Most people who have automobiles use road maps.

### Reading a map

The title and scale of the map tell us the kind of map it is. The scale of a map is the ratio of a given distance as represented on the map, to the same distance on the surface of the earth.

Example: $\frac{1 \text{ inch}}{100 \text{ miles}} = \frac{1 \text{ inch}=100 \text{ miles}}{}$

**Films and Filmstrips**

What is a Map? Sd. 87.1
FS. 1368
FS. 2209
Maps and Their Meaning FS. 369
Maps for a Changing World Sd. 939.1

Collect and display Maps of all kinds.

Make a map of the community where the school is located. Mark location of school on the map, locate stores, churches - libraries, banks and other public buildings.

Obtain free road maps of the United States or Maryland. Use for practice in using a scale to judge distances, to understand legends, and to identify highways, detours, etc.

## Legend or Key

The legend or key shows the method used for understanding the information found on the map. Some legends consist of lines, circles, dots, pictures, colors or words.

The legend on the landscape map shows the shape of the land and what the land looks like in the summertime, while the one on the physical map may show the land and water formations and may tell the elevation of the land in feet. Some legends on maps tell the average annual precipitation of certain places, the length of the growing season, the population of an area, routes to places, location of railroads, products, the climate, or airways.

Compare legends used on several different kinds of maps.

Make a products map of Maryland. Make a legend for the map.

## The Lines on the Globes and Maps (Difficult - Treat Briefly)

Lines are not marked on the earth, but directions are the same on the earth as on a globe. The lines on the globe which extend directly from pole to pole on the surface of the earth are called Meridians or lines of longitude. They extend due north and south, and no matter how far apart any two of them may be at the equator, they meet at the polar points. The lines which cross them at right angles are called Parallels or lines of latitude. If the globe is examined, it will be seen that the parallels form true circles. Near the equator those circles are large; near the poles they are small. The equator is the largest of the parallel circles. Its center, like those of all circles on the globe coincides with the center of the earth. The equator divides the globe into two hemispheres. The hemisphere north of the equator is the Northern Hemisphere and that which is south of the equator is the Southern Hemisphere.

Use globe or map of the world. Locate the United States - give longitudinal and latitudinal measurements.

Longitude

Meridians or lines of longitude are used to tell distances or position in an east or west direction around the earth. By international agreement of most nations, the starting line for the east-west direction begins at the meridian which passes through Greenwich, England (London). This first, or primary line is called the Prime Meridian. Distances measured east or west from this line are known as longitude, and are expressed in degrees or fractions thereof. West longitude extends half way around the earth from the Greenwich Meridian; east longitude reaches halfway around the earth in the opposite direction from the same meridian. All the way around the earth is a circle of 360 degrees. Halfway around is 180 degrees. The west and east longitude alike extend from 0 to 180 degrees. The American continent is in the west longitude.

Use globe or map of the world. Locate the United States - give longitudinal and latitudinal measurements.

Latitude

Parallels or lines of latitude are used to measure distance or position north and is expressed in degrees. From the equator to either North or South Pole on the earth's surface is one-quarter of a circle or 90 degrees. North latitude and south latitude both extend from 0 to 90 degrees.

Meridians and parallels intersect one another at right angles. The result enables one to determine positions, or locations, east and west of the Prime Meridian and north and south of the equator.

EARTH

Is the Earth flat, or square, or round like a ball? Scientists tell us that it is almost as round as a ball. It does not seem round when we stand or walk on it because it is so large.

One of the best ways to prove that the Earth is round is to fly around it. An airplane can take off from any place on the Earth. If it flies close to the Earth without changing direction, it will come back to the same place. Pictures taken of the Earth from rocket ships also prove that it is round.

Another way to prove that the Earth is round is to see the Earth's shadow on the moon. Once in awhile, the Earth comes between the sun and the moon. Then the Earth's round shadow may be seen on the moon.

Two important parts of the Earth are land and water. The third important part which we cannot see, is the air that we breathe.

From a space ship, we can see the Earth turning around or rotating. A make believe or imaginary line that goes through the Earth is called the Earth's axis. Scientist say that the Earth rotates on its axis.

The two places on Earth where the imaginary line comes out are called poles - the North Pole and the South Pole.

North always means toward the North Pole and South means towards the South pole. When facing north, south is behind us, east is to our right, and west is to our left. Down means towards the center of the Earth. Up means away from the center of the Earth.

Plan a visit to the Maryland Academy of Science.

Filmstrip and Film

We Live on A Huge Ball FS. 370

How We Know the Earth's Shape Sd. 953.1

Use globe to show how Earth rotates on its axis. Show the location of equator and poles.

Draw diagrams of globes. Label directions North, South, East, West.

Show directions on map of the United States - State of Maryland - Baltimore City

## Landforms

There are four types of landforms:

**Plains** - Plains are mostly stretches of flat land which we call level land. Sometimes a plain has a surface or top that looks like gentle waves in the sea. This kind of land is called a rolling plain.

**Plateaus** - Plateaus are different from plains in several ways. They are broad areas of land that stand more than a hundred feet above the land around it. Some plateaus are barren lands or deserts on which little will grow. Some plateaus have very deep valleys called canyons. Plateaus are usually found in mountainous land.

**Hills** - Hills have more slanting land than level land.

**Mountains**: - Mountains like hills have more slanting land than level land, but are usually 2000 feet higher than level land. These landforms are variations or combinations of the above landforms.

**Basin** - A low place in the surface of the land, usually with a body of water occupying the lowest part. (Example, Great Salt Lake in the great basin.) The entire area drained by a river system. (Example, Mississippi River Basin.)

Write to the United States Geological Survey Washington 25, D.C. for maps of area in which your community is located Identify land and water forms in the area.

Films and Filmstrips:

Land Areas and Land Formations
FS. 1405

The Surface of the Land FS. 1815

Mountains FS. 1815

Hawaiian Islands Sd. 902.1

Display pictures of the various kinds of land forms. Label

Bluff - A steep high bank beside a stream or body of water.

Canyon - A deep, narrow valley having high steep slopes; example: Yellowstone River Canyon.

Cape - A narrow piece of land projecting into the sea.

Cavern - A large cave of room size or larger.

Cliff -The steep, rocky face of a bluff beside a body of water.

Coast -Land along the sea.

Continents - Any one of the seven largest areas of land on the earth's surface, North America, South America, Europe, Asia, Africa, Australia, and Antarctica.

Crater - The bowl shaped opening at the top of a volcano.

Desert - A large area of land with little or no moisture or vegetation.

Earth - The planet on which man lives. Any amount of soil found on the surface of the earth.

Forest - A large area of land covered with trees.

Island - An area of land surrounded by water.

Isthmus - A narrow strip of land connecting two larger bodies of land.

Display pictures of the various kinds of land forms. Label.

Make deserts by painting outline forms with glue and scattering with sand.
Make a relief map showing land forms in the United States or - in the State of Maryland - in Baltimore City.

Display pictures of land forms - label.
Have pupils illustrate land and water forms.
Use pictures for a bulletin board display.

Peninsula - A piece of land nearly surrounded by water and attached to a larger area of land or the mainland by an isthmus.

Prairie - Any natural grassland; but usually used to describe the vast areas of level or rolling land without trees in the central part of the United States.

Valley - The land between hills or mountains usually containing a stream.

Volcano - A cone shaped mountain formed by lava and cinders erupted thru a crater. A crater is an opening in the earth's surface from which flows or has flown molten rock, steam, cinders, gas, and rock fragments. An active volcano is one which is pouring forth any or all of these materials. A dormant volcano is one which has temporarily ceased such eruptions.

Display pictures of land forms - label

Have pupils illustrate land and water forms.

Use pictures for a bulletin board display

Plan a travelogue on relief features of the U.S. (Pictures or slides may be made and used in the opaque projector.)

Display pictures of water forms - label.

Waterforms

There is three times as much water as land on our earth. These are common water forms:

Bay - An inlet of the ocean or part of the ocean bordering on land and partly surrounded by land. Any small body of water set off from the main body of an ocean, lake, or gulf.

Canal - A man made channel filled with water used for navigation, irrigation, or drainage.

Dam (man-made) - A bank or wall built across streams or rivers to hold back the water.

Glacier - A large sheet or stream of ice formed in an area, usually at high elevations where the temperature remains below or near freezing and more snow accumulates in winter than melts in summer.

Gulf - An area of water bordering on, and lying within a curved coastline; usually larger than a bay and smaller than a sea.

Harbor - A sheltered body of water where ships anchor and are protected from storms.

Iceberg - A huge block of floating ice broken from a glacier; found in the most northerly and southerly area of the world's oceans.

Lake - An inland body of water usually of considerable size.

Oasis - A fertile spot within a desert, watered by underground springs or by irrigation.

Ocean - Any one, or all, of the five largest connecting bodies of salt water on the earth's surface. The Atlantic, Pacific, Indian, Antarctic and the Arctic Ocean.

River - A large stream of water of natural origin which drains an area of land and flows into another river or body of water.

Sea - A large body of water partly or nearly surrounded by land. Sometimes used to describe all the ocean area of the world as a unit.

Plan a tour to include six scenic points in the United States or the State of Maryland.

Make a mural of the Baltimore Harbor.

List the names of land and water forms in your city - in your state.

Make a model (use plasticine or clay) of a river system.

Springs - Water which bubbles continuously from the rocks or out of the ground usually found in mountain regions are called springs.

Strait - A passageway of water connecting two large bodies of water.

Stream - A flow of moving water; usually, of natural origin.

## DAY AND NIGHT

The great round ball we live upon is turning and spinning like a top as it moves around the sun. The axis upon which the earth rotates or turns is a make-believe line through the earth from the North Pole to the South Pole. This is called the axis. As the earth turns on its axis, the sun shines on different parts of our earth. When the part of the earth on which we live turns toward the sun our day begins. All morning we are turning away from the sun. As evening begins, night comes. We cannot see the sun because we are no longer facing it. Have you ever heard someone say that "the sun rises in the east and sets in the west?" Scientists say that this is not true since the sun does not move. The earth rotates on its axis and turns from west to east as it revolves around the sun.

Use mechanical planetarium to develop understandings pertaining to rotation and revolution of the earth.

Check the newspaper reports. Record the time of sunrise and sunset for a week. Discuss reason for difference in time.

## The Seasons

At the same time that the Earth rotates on its axis, it also moves in an orbit around the sun. It takes the Earth one year to go around the sun.

The Earth's axis is always tipped as the Earth travels around the sun. Therefore, the sun's rays strike different parts of the Earth's surface at different times. This causes the four seasons in the place where we live on the earth.

Film
The Seasons of the Year Sd. 550.1

During the months of June, July, and August, the North Pole is tipped toward the sun. During these months, the countries in the Northern Hemisphere have Summer. There are long days and short nights. Many of the days are hot. The sun is high in the sky. The higher in the sky the sun is, the hotter it seems because the sun's rays then hit the Earth more directly.

During these months when the North Pole is tipped toward the sun, the South Pole is tipped away from the sun.

The people in the Southern Hemisphere have Winter during these months. There are short days and long nights. The sun is low in the sky. Some places have cold weather with snow.

During December, January, and February, the North Pole is tipped away from the sun. Then people in the Northern Hemisphere have winter. During the same months of December, January and February, the South Pole is tipped toward the sun and countries in the Southern Hemisphere have summer.

When it is summer in the Northern Hemisphere, it is winter in the Southern Hemisphere. When the Northern Hemisphere has winter the Southern Hemisphere has summer.

Summer is followed by fall and winter is followed by spring.

Use diagrams to illustrate the position of the Earth and Sun during each of the four seasons.

Collect and display pictures to show different seasons of the year in different sections of the United States.

Climate What will the climate be?

The climate of a place depends upon the kinds of weather it has year after year. What is the climate of the place where you live? Name some place you know of that has a hot climate, a cold climate, a wet climate, and a dry climate. Do you know why the climate is <u>different in each of these places</u>?

Use diagram to explain the major climatic regions of the world. Have pupils label the diagram

The kind of climate we have depends upon the place where we live. There are many countries besides ours that are called the lands of four seasons. Other countries have different climates. Let's look at the globe and find out why they are different.

Countries closest to the Equator have hot rainy climates. Countries located as far above the Equator and as far below the Equator as our own have climates like ours. Countries located in the far northern part of the world and in the far southern part have cold climates.

There are other reasons for the climate being different in different places.

Climate in all places depends upon the way in which the rays of the sun strike the earth, the amount of water there is near it, the mountains located in the region and the direction of the wind. Why is it hot in the southern part of our country in winter and very cold in the northern part? Are there deserts in our country? Why?

The Tropics

Look at the diagram of the globe on your paper. What kind of climate do places have which are located near the Equator?

The places near the equator have very hot, wet climates because the sun's rays are shining directly on them. In some places the people never have a dry season. It rains every day and when it isn't raining there is so much moisture in the air that everything is damp. There are vast forests in these lands. The people live in a simple home in a forest village. They do simple farming and earn a living by selling fruits and vegetables in a large city.

In a few places changes have come as fast as anywhere in the world. In other places, people still live much as they did hundreds of years ago.

Locate the climatic regions on a map of the world. Show pictures of these regions.

## Grasslands

In lands not too far from the tropics, the climate is half wet - half dry. During the dry season the air gets so hot and dusty that the country seems like a giant furnace. When it does rain, the rain starts with a few light showers and ends in torrents. It rains everyday for six months. In these places, there are broad grasslands - dotted with clumps of trees. Hundreds of cattle graze in the grasslands. In small gardens, people grow vegetables and fruit. Beans, corn, sugar cane, bananas, and fish are traded. Iron ore is dug from the ground in certain sections of this land. Blacksmiths use the ore to make axes, spears, needles, bracelets, and anklets. Baskets are made from bamboo. Many things are also made from copper, and wood.

Show pictures of the animals that live in this region of the world - both wild and tame. (elephants, tigers, giraffes, sheep, buffalo, rhinoceros)

## Deserts

A little north and south of the grasslands are the hottest places on earth....and the driest. Like most deserts found in our country, the rainfall is less than 10 inches a year. How much rainfall do we have in Baltimore in a year? Have you ever seen a desert? Where are deserts found in the United States? People who live on deserts are called nomads. They live in tents instead of houses. When these people move they carry their tents with them. The tents are usually made of cloth woven from goat's hair and the wool from the sheep.

On an outline map of the United States locate a desert.

The nomads depend upon sheep and goats for their meat, milk, cheese and butter. Camels are used for transportation. Donkeys are used for carrying heavy loads.

Water in the desert is found in wells, springs, or rivers. Some people who live near the oasis can make a living by farming.

They do not move from place to place as nomads do.

Have you ever eaten dates?
The date is one of the most valuable fruits grown in desert lands. They may be dried and kept for months. The branches of this palm tree may be used in building simple houses. Leaves are used in making mats or baskets. The entire tree may be used for fuel.

Continental

How would you like to live in a place where the sun shines practically everyday in the year?

Have you ever lived in Southern California?
Some places in the world have the same type of climate as Southern California. In these lands, there is almost no rain in summer. Winter is the rainy season. After the mild, rainy winter comes the spring harvest. Wheat, barley, and grains are harvested. Farmers grow summer crops such as vegetables and rice where the land has been irrigated. There is also a harvest from fruit trees and grapevines. Olive trees can live through the hot summer without extra water.

What is the climate of the region in which we live? The land we live in and those that have four seasons have changeable weather. After the long winters, spring is beautiful. During the summer day light hours increase, temperatures climb to the 90's. Autumn is the harvest season and the weather is dry, bright, clear and pleasant. How do the people make a living?

Have pupils make a calendar of work and weather for their community.

List the different jobs done in the home in each of the four seasons.

Frozen Lands Beyond the Forests

Have you ever heard of the Eskimoes?
Where do they live?
How do they live?

In the northern treeless lands, it is hard to tell one season from another. Frost may come at any time, even in the summer months. Near the North Pole, there are areas where the sun can be seen continuously for six months. Here,the summer sun shines so long that there is no daylight. Many people believe that the land beyond the Arctic lands, actually are alive with living things.

Display pictures of the Eskimo and animals found in this region. (Reindeer, walrus, whales, fox, ermine, wolves etc.)

During the summer months plants cover the earth, animals roam the treeless lands, the oceans swarm with fish, and the air is alive with birds. The emperor penguin is the largest of all penguins who live on the Antarctic ice.

<u>A land of eternal ice and snow</u>

Around the South Pole there is one of the emptiest and strangest regions on the earth. This is the continent of Antarctica. Much of Antarctica is unexplored. This continent is a large plateau lying more than 6,000 feet above sea level. Mountain ranges border the plateau.

Plan an imaginary trip to Antarctica. List the things you would need to take with you if you were going to stay a year.

The entire region is buried under a gigantic cap of snow and ice several thousand feet thick. It is the home of penguins, seals, and whales. It is one of the coldest lands in the world. Winter temperatures are known to be 80 below zero. Summer temperatures are usually around 20 below zero.

Make a mural that shows important scenes on the Antarctic Continent. Show the ice shelf along which ships unload. Show penguins, houses, an airplane landing on the ice, moutains and rivers of ice, icebergs, seals, and whales in the water near the continent.

Glaciers move slowly from the interior of the land, through mountain passes, until they finally spill into the surrounding ocean. The Ross Shelf is one of the well known sheets of ice more than 300 feet thick that extends into the sea. It is 150,000 miles square in some places.

Make a list of the changes that would be necessary where you live if the temperature dropped below 0 degrees almost every winter for several months and if it were dark for several months.

Huge masses break off from the shelves and drop into the sea forming icebergs.

Famous Antarctic Explorers

Many explorers helped us learn about this continent which is covered with ice. The first men to reach the South Pole were Roald Amundsen of Norway and four men of his group. They reached the Pole in 1911 only a few days before Robert F. Scott of England and four of his men reached the South Pole. Amundsen and his men used dog teams to travel to and from camp.

The most famous explorer was Admiral Byrd of the United States. He traveled five times to Antarctica. On one visit, he found food left by Captain Scott, forty years before. All the food was good. It had been frozen! Much of what we know about this continent, we owe to Admiral Byrd and to the other brave men who went to Antarctica with him.

Explorers know that Antarctica was not always as cold as it is today. They know that at one time the land was much warmer because they have found coal in the mountains. Coal can be found only where trees and plants once grew.

The North Pole is another cold place which was explored by Robert E. Peary. He, too, made many expeditions to this cold land in 1909. Mathew Henson, was the only American Negro who accompanied Robert E. Peary when the explorer reached the North Pole. Henson was a Negro born on a farm in Maryland. He went on expeditions with Robert Peary for more than twenty years as a personal attendant and dog-driver. He received many honors for his part in 1908-9 expedition.

Read the story that Admiral Byrd wrote about the winter he spent by himself in Antarctica. The book is called "Alone"

Make class booklet containing pictures and short stories (pupil made) about the Antarctica.

He wrote a book entitled, A Negro Explorer at the North Pole. When Henson died in 1955, he was honored for his work with Peary. The story of his life, Dark Companion, was written by Brodley Robinson and was published in 1947.

In 1956, eleven nations worked together to help us learn more about the coldest continent. Some drilled holes in the ice to learn how deep and cold it is. Others used weather balloons with radios to learn more about the wind and the temperature. Some tried to find out about rocks, animals, and the mosses found on this continent. They learned that it is the only continent where men do not live all the time because of the cold climate. No one knows exactly where the land is underneath the ice.

They also learned that the sun never sets in the summer and that it never rises in the winter in this cold land.

Globes, maps, continents, oceans, climates, people and products are but a few of the many things you learned about in studying the geography of the earth on which you live.

The city in which you live is only a small part of our big world. In some ways it is like other parts of the world. In other ways it is different. No place on earth is exactly like the place where you live. Some day, like the explorers you, too, may be able to visit many places in this world and see and learn many things about the way man lives.

Plan a culminating activity such as:
an assembly program

1. have pupils use pictures, murals, slides, etc., made by pupils in presenting information to the audience.
2. an imaginary trip using the tools of geography; present as a travelogue.
3. a sand table showing the topography of Maryland - a river system.

## INTRODUCTION TO OCCUPATIONAL INFORMATION

I. UNDERSTANDING

A. People work to earn money in order to pay for the things which they and their families need and want.

1. Food
2. Clothing
3. Shelter
4. Doctor & Hospital bills
5. Insurance
6. Furniture
7. Education
8. Recreation
9. Cars
10. Luxuries

B. People work because they enjoy using their hands and minds

C. People work, because work - in the home or outside the home is good for their mental health

D. Young people can learn many things in school which will help them when they are ready to go to work.

II. Motivating Activities

A. Arrange a bulletin board showing <u>many</u> types of workers. Use as basis for discussion.

B. Make a chart of all types of work done by pupils and their parents. Use as a basis for discussion.

References for the pupil.

Handbook for You the Worker, Division of Special Education, Baltimore Public Schools, Revised December, 1960

Getting a Job is Not Enough, Baltimore Public Schools, 1954

The Telephone and You, Chesapeake & Potomac Telephone Company, Baltimore, Maryland, Attention: Miss Amanda Bowman, 1958

Telephone Kit - available from Chesapeake & Potomac Telephone Company - Use Yellow Pages in Telephone Book

Kitch: Exploring the World of Jobs, Science Research, 1955

Stevens: Good Grooming for Girls and Boys, Science Research, 1956

Stoops, et al: Planning Your Job Future, Science Research, 1953

References for the teacher:

Employment in the Baltimore Metropolitan Area, Department of Employment Security, Baltimore, Maryland, 1959

State Employment Service: How to Get and Hold the Right Job

Hatcher, et al: Adventures in Home Living, New York, D.C. Heath, 1959

Lyons, George J. & Martin, Harmon C: Seven Keys to Getting and Holding a Job, Book I, Gregg Publishing Co., 1942 Chap. 7

Price, et al: General Business for Everyday Living, New York, McGraw Hill, 1954

III. Suggested Content

You are all too young to work at the present time, however, if you add to your knowledge about "jobs" during the next few years you will be better able to get and hold a job when you are older. Each year that you are in the Junior High Special Curriculum you will study about JOBS . This is your first year in the Junior High Special Curriculum and the unit you are now going to study about JOBS will be a fairly short one. Next year, and the year after that you will learn more and more and by the time you leave school you should have a great deal of worthwhile information plus a number of real life experiences which will make you feel more at ease when you look for work.

People must work, unless they are very wealthy, in order to buy food and clothing and pay the rent. Most people want to work and only the young and the very old and the sick do not work. In our country, at present, there are not enough jobs for everyone who wants to work and needs to work. This is not a good thing. What do you think could happen to a person who wants to work but who cannot find a job?

What do you think you can do in the next three or four years that will help <u>you</u> find work.

A. Stay in school and get all the education you can.

B. Learn and Practice Good Work Habits.

1. Give attention to person speaking
2. Follow directions carefully
3. Keep work neat
4. Have work correct
5. Finish work started
6. Be punctual
7. Have good attendance
8. Get along with fellow-workers

C. Learn How and Where to Look for Work

1. Through relatives
2. Through Employment Offices
3. Through Want 'Ads'

Discuss how one makes the most of his educational opportunities.

Develop this list with the class. Have each pupil make a chart and rate himself on his work habits.

Let's read these want ads and decide which jobs you might apply for if you were job hunting.

MALE

Boy Full time, to work as car hop
No experience necessary. Hours 5:30 P.M. - 12:30 A.M.
Must be 18 if in school, 16 if out. Good pay plus company benefits.

BOY - Steaming and examining umbrellas.
Steady work.

BOYS - Part time, after school, working with route manager. Circulation sales department. Salary plus commission.

BOYS 14-17 to collect information after school and on Saturday, Sales Co. Salary.

Use newspapers and have pupils find and read want ads for jobs they think they could hold.

Explore what each job might require.

Discuss vocabulary, used in ads example.

Company benefits

"Circulation sales

Help Wanted

GIRLS

GIRL - Experienced sleeving and folding shirts.

Night shift 4:30 - 10 P.M.

GIRL

Light office work, small starting salary.

Typing and filing required.

GIRL

Fountain and luncheon work - Hot food and grill.

GIRLS

Shirt pressers - must be dependable.

Steady employment - Salary.

D. Learn to Fill in Application Blanks

When you are asked to fill in an application blank you must be able to do the following:

1. Read what is printed on the application blank.
2. Know the meaning of the words on the blank.
3. Know the correct answers to the information asked for.
4. Know how to spell the words needed in giving the information asked for.
5. Know how to print and write small enough to fill in the information asked for.

Practice each of the five steps listed in filling out simple application blanks.

E. Learn how to dress and act and what to say at an interview. — Role play simple interviews.

1. Type of clothes to wear
2. Make-up for girls
3. Poise
4. Information needed
5. Question one might ask

F. Study reasosn for people losing jobs. — Develop list with class.

Have pupils see how each reason affects an employee's rating.

1. Absenteeism
2. Tardiness
3. Uncooperativeness
4. Not clean
5. Lazy
6. "Fresh"
7. Dishonest
8. Not able to follow directions
9. Not able to get along with co-workers
10. Too slow for type of work

## GENERAL INFORMATION WHICH WILL HELP THE WORKER

1. Learn how to use the buses
2. Learn how to find street numbers
3. Learn how to use telephone directory and the telephone
4. Learn how to get bus information from Transit Company
5. Study the down town section of your city -
   East & West dividing street
   North & South dividing street
6. Get your birth certificate or a statement of age
7. Get your Social Security card and learn your number

Study main bus lines.

Find numbers of houses on streets in the neighborhood.

Learn which side has even numbers and which side has uneven numbers.

Practice use of telephone directory and telephone.

Draw a map showing N & S

E & W dividing streets.

Take a trip to nearest Social Security office and get card.

SUMMARY

Many young people do not realize that the habits and attitudes they form in school will either help or hinder them when they become workers The very same habits which make a good pupil also help to make a good worker. In this unit we have learned some important things about work. Let us see if you can name a few things you should know.

(Develop with class)

Get all the education you can.

Try to form good work habits.

Know places where a person can look for a job.

Know how to dress and act and what to say at an interview.

Know why young people lose jobs.

Know how to use directory and telephone.

Know how to get around in your community and downtown.

## Living Things

I Understandings
- A. The things in our world are either living or non-living.
- B. Plants and animals are the only living things on earth.
- C. Living things depend on living and non-living things for life and growth.
- D. Animals depend upon plants for life.
- E. Some living things help us; others, harm us.
- F. Man can change living things.
- G. Man depends on other living things for food, clothing, shelter.

II Motivating Activities
- A. Bulletin Board Display
  - 1. "Flowers - Garden - Desert - Forest"
  - 2. "Animals - Then - Now"
  - 3. "Animals - Friend or Foe?"
- B. Field trip to nearby florist or park.
- C. Exhibit
  - 1. "Can You Guess Where It Came From" - Title
  - 2. Display - nylon hose, cotton cloth, paper, vegetable oil
- D. Observation
  - 1. Plant seeds, bulbs
  - 2. Start carrots, potatoes, etc. in water

III References

- A. Barnard, et al: Macmillan Life Science Series, Bk. 4, Macmillan Publishing Co., N.Y., 1960
  " " " " " " Bk. 5, " " " " "
- B. Bond, et al: Experimenting in Science, Lyons and Carnahan, Chicago, 1959
- C. Byrd, et al: Building for Health, Laidlaw, Summit, N.J., 1960
- D. Craig, et al: Discovering with Science, Ginn, N.Y., 1958
- E. Dowling, et al: The New Seeing Why, Winston Publishers, Phila, 1957
- F. Frazier, et al: How and Why Experiments, L.W. Singer Co., Syracuse, N.Y., 1949
- G. Jacobson, et al: ABC Science Series, Bk. 3, American Book Co., N.Y., 1961
- H. Schneider, et al: Science in the Space Age, Book 7, D.C. Heath, Englewood, N.J., 1961
- I. Smith, et al: Science Workbook, Grade 3, Lippincott, N.Y., 1957
- J. Thurber, et al: Exploring Science, Allyn and Bacon, N.Y., 1960

Plants and animals are the only living things on earth. Everything else is non-living. As you learn about living things you will discover that they depend upon non-living as well as living things for their lives. The non-living things are light, heat, water, soil, air, and pressure.

Living things are alike in many ways. They breathe. They have to have food. They grow. They produce or help to produce other living things like themselves.

Plants are the most important living things. Animals cannot live without the food they supply. There are thousands of plants throughout the lands and waters of the earth. Some are so tiny they can only be seen through a microscope; others are huge. We cannot learn about all of the plants on earth, but we can group those with similar characteristics and study their pattern of life, growth, and reproduction.

Some plants produce seeds; some do not. Some plants are green; others, non-green. Some plants are cared for or cultivated; others, grow wild. Some plants are very simple in structure, others are quite complicated.

More than a half of all plants grow from seeds. Many of these produce seeds that develop inside of flowers. They are called flowering plants. There are other plants that produce seeds on cones. Pine, cedar, and spruce trees produce their seeds on cones.

Flowering plants are very useful to man. In fact, man could not live without them. They provide him with food, clothing, medicine, oils, lumber, and pulp for making paper.

Flowering plants have roots, stems, leaves, and flowers. Each part has a job to do. Roots have two important jobs. They hold the plant in the ground.

Directed Reading: The New Learning Why, pp. 37-64.
Dowling, et al: John Winston Co. Philadelphia, 1957

Directed Reading: The New Learning Why, pp. 71-88.
The New Discovering Why, pp. 161-202.

Show:
"Green Plants - Food Factories of the World" - Fs 2448
Directed Reading: Discovering with Science, pp. 51-63, Craig, G., et al: Ginn, N.Y., 1958
Experimenting in Science, pp. 224-235, Bond, A.D., et al: Lyons and Carnahan, Chicago, 1959
Directed Reading and Experiments: Science, Victor C. Smith, Lippincott Co., New York, 1957 (Books 3 and 4 have material on many phases of this unit)

Collect seeds from seed-bearing plants like peas, beans, corn, lemons, apples, oranges. Mount and label.
Discovering With Science, pp. 129-135, Craig, G., et al: Ginn, 1958, N.Y.

Discuss, list, and collect plants or pictures of plants used for food, clothing, medicine, oils. Chart same.
Directed Reading Activity: ABC Science Series Gr.6, pp. 30-56

Show: "Parts of a Flowering Plant" - Fs 412
"Roots" - Fs 2411

They also act as a passage way through which water and minerals pass to other part of the plant. When the water and minerals reach the leaves, they are changed into food. The food is carried to other parts of the plant and stored there. Some plants, like beets and carrots, store food in their roots.

The stems of plants hold the leaves and flowers above the soil and carry nutrients and food to various parts of the plant. Each stem has tubes for this purpose. One set of tubes carries water and minerals to the leaves upward; another set carries food downward to all living parts of the plant. Some plants, like celery, asparagus, onion, and white potato store food in their stems.

Some stems grow underground. The white potato is an underground stem. Onions, daffodils, hyacinths, lilies, and tulips have underground stems called bulbs.

The leaves of the green plant are the food factories of the plant. They get carbon dioxide from the air. The carbon dioxide enters through tiny openings in the leaves. Water comes from the ground through tubes in the roots, stems, and leaves. Inside the leaves, the carbon dioxide and water combine when the sun shines on the leaves and make a form of sugar. Only green plants can make food.

The flowers of plants produce seeds that will sprout into new plants of the same kind. Flowers have several parts which work together to make seeds. There is a green leaf-like collar at the base of the flower to protect the bud. Its blades are called sepals. In the center of the flower, there are slender, thread-like organs called the pistil. The petals surround the pistil. The base of the pistil looks like a bulb. The base is called the ovary. The ovary contains tiny egg-shaped organs called ovules. The ovules develop into seeds.

Make: Large cut-out of a plant. Label part and function.
Show: "How a Plant Makes Food" - Fs 2054
Directed Reading: Experimenting in Science, pp. 229-230, Bond, A.D., et al: Lyons and Carnahan, Chicago, 1959
Show: "Green Leaves and How They Grow" - Sd 643.1
Experiment: Use celery or a white flower. Place in water colored with red or blue ink.

Make: Leaf prints
Show: "Finding Out How Plants Grow" - Fs 2306

"Stems" - Fs 2407
Collect and plant bulbs.
Draw pictures of plants having underground stems.
Show: "Green Plants" - Fs 2408

Directed Reading: Exploring Science, Book Five, pp. 306-322, Thurber, W.A., Allyn and Bacon, 1960

Make wall plaques - pressed flowers or plaster-of-paris molds.
Show: "Seeds" - Fs 2410

Around the ovary of plants are a number of long, thin threads which become thicker at their lower ends. These are called stamens. The thickened ends of the stamen ripen and split open. The yellow dust, or pollen on the inside comes through the openings. Before seeds can develop a grain of pollen must enter each pistil. Insects that visit flowers for nectar pick up pollen from stamens and drop it on the pistils of other flowers they visit. Sometimes the wind blows pollen from one flower to another.

Nearly all flowering plants produce some kind of fruit. We think of such things as apples, pears, peaches, oranges, grapes, and watermelons as fruits. But, did you know that tomatoes are fruit? Green beans, ears of corn and pods of peas are fruit. A fruit is the seed, or seeds, of a plant together with the parts that cover it.

In order for each type of plant to continue to come up year after year, the plant seeds must be scattered far and wide. The wind helps to do this. Plants have ways of scattering their own seeds. Some seeds are produced in little bags shaped like balls. These fall from the stem of the plant and roll long distances leaving a trail of seeds in their wake. Other seeds have attachments that look like parachutes which help them float long distances through the air. People and animals also help to scatter seeds. Can you think how?

Although most plants grow from seeds, plants may be started from stem cuttings, leaves, bulbs, runners, or grafting.

Plants that do not produce seeds are very different from the flowering or seed producing plants. You may have heard of some of these, bacteria, mushrooms, toadstools, yeasts, molds, mosses, and ferns. All of these are very simple plants that cannot make their own food.

"Reproduction in Plants" - Sd 661.2

Model fruits from clay; Bake. glaze . Use as decoration for dining room .

Plant fruit seeds
Show: "Flowers and Fruits" Fs 2409 - Fs 2618
Directed Reading: The New Seeing Why, Dowling, T., et al, pp. 31-52
Directed Reading
Exploring Science Bk. Three pp. 19-32
Secure the following free materials:
"The Story of Plants"
"The Story of Soil"
Swift and Company
Agricultural Research Dept.
Chicago 9, Ill.

Directed Reading:
Discovering With Science, pp. 126-143
Craig, G., et al: Ginn, N.Y., 1958
Grow plants from cuttings, leaves, bulbs, and runners.

Experimenting in Science, pp. 33-49
Bond, A.D., et al: Lyons & Carnahan, Chicago

Some may live inside other plants and animals. Some live on the outside of plants and animals. Some live on dead plants and animals. They have no roots, stems, or leaves.

Bacteria are the smallest of all the seedless plants. You cannot see them without a microscope. They are found in the earth, in water, and in the air. There are millions in the bodies of plants and animals. They are also found in anything that has decayed.

Some bacteria are useful to us. They help to make buttermilk and vinegar, to cure leather, and to make cheese. Some bacteria are harmful to man; these cause disease. Bacteria grow best in warm, moist, dark places. This is why we refrigerate foods we want to keep. Cold temperatures slow down the growth of bacteria. If we want to kill bacteria we may raise the temperature of the food. Bacteria are destroyed in milk by keeping it at a 145° F temperature for 30 minutes. This is called pasteurization.

The yeast your mother uses to bake bread is a plant. The yeast cake is made up of thousands of tiny yeast plants. Sugar is the chief food of yeasts. They change sugar to carbon dioxide and alcohol. This causes bubbles to rise in the dough. The dough rises, too. Yeast will not work if the mixture is not moist.

Man has made changes in plants through care and experimentation. The plants man cares for are called cultivated plants; others, wild. Luther Burbank is famous for the changes he made in plants. Many of the fine food plants and beautiful flowering plants we have today are his work. He watched plants and used only seeds from the finest to grow new plants. He mixed the pollen of plants to produce a new plant.

Grow mold on slices of bread. Examine through microscope.
"Dependent Plants" - Fs 2253

"Simple Plants, Bacteria" - Sd 659.2

Building for Health, Gr. 4, p. 166, Byrd, O.E. et al: Laidlaw, Summit, N.J., 1960

Make series of posters showing ways to prevent the spread of bacteria.

Use yeast in mixture of flour and water. Record action.

"Man Improves Plants and Animals" Fs 2038
"Plants Grow" Fs 1542

From the peach and the apricot, he produced the nectarine. From the raspberry and the blackberry, he produced the boysenberry.

We cannot do the things Burbank did, but we can raise beautiful house and garden plants. Coleus branches, Wandering Jew, Philodendron, and Geraniums are easily grown from cuttings. The first three can be started in water. When many roots appear on the stem, they are transferred to soil. Geraniums grow roots in wet sand. They grow roots in about two weeks. Then we dig the cutting up and put it in a pot of good soil. Loam, a mixture of clay, sand, and bits of dead plants and animals, is the best soil for plants.

Plants need water, air, and sunlight for best growth. Sometimes they may need special plant foods.

Animals and plants are alike in some ways. They need the same things for survival,- food, water, air, and the right temperature. Both grow and reproduce their own kind.

There are some differences between plants and animals, however. The green plant can make its own food; no animal can make its own food. Few plants can move about; all animals can.

Just as we think of plants in two large groups, so may we think of animals. There are animals with backbones and animals without backbones. Animals that have backbones are called vertebrates; those that do not have backbones are called invertebrates.

Although 95% of all animals in the world are invertebrates, those we know best are vertebrates. It will be easier to learn about vertebrates if we divide them into smaller groups. These are: Mammals Birds Reptiles Amphibians Fishes

Directed Reading: Exploring Science, Book Four, pp. 200-210; pp. 36-48
The New Seeing Why, pp. 53-59

Experiment: Grow plants from cuttings

Observations(1)Bring in garden soil. Put in water and allow to stand. Observe composition.
(2) Plant in rocky soil; loam.
(3) Plant in pot with air vents; without air vents.
(4) Place one plant in sun; another in dark place.

Show: "What is Soil"? Fs 1108

Show: "How Animals Are Grouped" - Fs 2051

Collect pictures and classify according to structure: vertebrate - invertebrate.

Show: "Big Land Animals of North America" - Sd 836.1

Begin booklets in which to compile notes and illustrations for each group of vertebrates.

Mammals are vertebrates that have hair or fur on their bodies. Mammal babies are born in the same way you were born. Mother mammals produce milk to feed their young. The largest mammal is the whale.

Birds are vertebrates that have feathers when they are full-grown. All birds come from eggs. A bird's egg will not hatch unless it is kept warm for a number of days. All birds have two legs. All birds are air-breathing animals. All birds have two wings; but, all birds do not fly. The penguin and the ostrich are birds that do not fly.

Directed Reading Activity
Exploring Science, Book 4, pp. 114-130

Reptiles are vertebrates that have scales or hard coverings. People usually think of snakes when they hear the word "reptiles".
Snakes, however, are not the only reptiles. All reptiles are alike in two ways. They are cold - blooded animals and air-breathing animals. Almost all reptiles are land animals. Lizards, alligators, crocodiles, and turtles are reptiles.

Show: Fs - 2311 - "When Reptiles Ruled the Earth"

Directed Reading Activities
Exploring Science, Book 4, pp. 216-232
Show: Fs 1379 - "American Reptiles and Amphibians"
Observe turtle, lizard in classroom.
Record observations.

Amphibians are vertebrates that have smooth, slimy skins. Most of them live both in water and on land. They look like fishes when they are young and like reptiles when they grow up. Most of them breathe with gills when they are young, and with lungs when they are grown. They are cold-blooded animals. Their young are hatched from eggs. Frogs, salamanders, and toads are amphibians. They are very useful to man because all amphibians are insect eaters.

Directed Reading Activities
Exploring Science, Book 3, pp. 160-174

Fishes are the last group of vertebrates. They live in rivers, lakes, ponds, and oceans. All animals with fins and gills are fish. They breathe through their gills. They use their fins and tails to swim against the current of the waters where they live.

Visit a market to identify fish commonly used for food.
Collect pictures of fish commonly used.

Sharks are fish although some are 65 feet or more in length.

Fish are important to man as food. You have probably eaten trout, perch, bass, mackerel, catfish, salmon, sardines, tuna, and codfish.

Invertebrate animals may be divided into smaller groups also. Some of these are:

| | | | |
|---|---|---|---|
| Protozoa | Sponges | Coelenterates | Echinoderms |
| Worms | Mollusks | Crustaceans | Myriapods |
| | Arachnids | Insects | |

These names are so difficult you cannot remember them, but you know some of the animals that belong to each.

The simplest animals among the invertebrates has only one cell. They are so small they cannot be seen with the naked eye. They live in both fresh and salt water. They move about and absorb food from the water around them. Sometimes they enter the bodies of other animals and get their food from them. These animals are important because they supply food for larger animals. Some are harmful to man because they cause a fever known as malaria and a disease called sleeping sickness.

Are you surprised that sponges are classified as animals? They look more like plants. The sponge you use to wash your blackboards is really a skeleton. Sponges live in salt water. Some sponges grow from an egg; others merely branch out from an older sponge. If you cut a live sponge into little pieces and throw them back into the water, many of the pieces will continue to grow.

Jelly fishes, corals, sea anemones, and sea fans are invertebrates that inhabit the sea. (Colenterates) Each of these usually has a mouth surrounded by tentacles. These tentacles can shoot out like daggers and sting. The jelly fishes can float or swim about; corals must remain in one place as long as they live. Corals multiply by budding and build higher and higher

Begin booklet in which to compile notes and illustrations on invertebrates.

Examine pond water under microscope. Identify parts of cell.

Have pupils make a diagram of a cell.

Read story of Dr. Walter Reed

Secure live sponge, if possible.
Observe growth.

Show: Sd 834.1 - "Beach and Sea Animals"

until they form reefs. Coral reefs act as breakwaters and protect the shores from washing away. The Florida Keys, a long line of islands, are really coral reefs. Sea anemones look like flowers. They are beautiful and have bright colors, however, if you tried to keep one in a tank you would have to give it minnows to eat.

The starfish, the sea lily, the sea cucumber, the sea urchin, and the sand dollar (Echinoderms) are not what their names suggest. The sand dollar is not money, the sea urchin is not a child, the sea cucumber is not a vegetable, the sea lily is not a flower, nor is the star fish a fish. All are animals of the sea with "spiny"-skins, and pointed projections. We often find their skeletons near the sea; we seldom see them alive.

We all know a great deal about the group of invertebrates called worms. There are three types of worms, flat, round, and segmented.

Some flatworms live in ponds and streams; others, in the bodies of other animals. The tape worm is an example of a flat worm that lives in the bodies of higher animals including man. The tape worm has no mouth. It absorbs digested food. Tape worms grow very fast. One type grows to be as many as 50 feet long. There is a tiny round worm that causes a part of the body to grow large, if it enters the body; another, found in pork that is not well cooked, causes a serious disease also. On the other hand, the earth worm you so often see after a heavy rain is very useful. It lives on decayed matter in the soil. As it burrows under the soil in search of food, it makes openings in the earth. This breaking up of the earth allows air to enter and makes it easier for plants to send their slender stems upward.

Directed Reading Activity
Exploring Science, Book 4, pp. 210-214
Show: "Earthworm Anatomy" - Sd 971.1

Have pupils bring in worms; observe habits, identify.

Scallops, oysters, clams, and snails (Mollusks) are soft-bodied invertebrates. However, most of them have hard shells. Their shells provide the material from which pearl buttons are made. The lovely real, pearls ladies like in earrings, rings, and necklaces come from oysters and clams. We eat scallops, oysters, clams, and many people, like snails.

Centipedes and thousand-legs (Myriapods) are jointed invertebrates. They thrive in dark, damp places. They are rather frightening to look at, but they do little to either help or harm us.

Spiders, scorpion.., daddy-long-legs, and ticks (Arachnids) are invertebrates we often call insects, but they are animals. Each has four pairs of legs; insects have only three pairs. For the most part, these animals are harmless.

Observe snails in an aquarium

Make a collection of pearl buttons.

Begin a collection of insect specimens.

Use pipe stems to construct models of insects.

Show: FS. 2272 "Spiders"
Sd. 733.1 "Insects Are Interesting"
FS 1076 "Backyard Insects"
Sd. 724.2 "Wonder of The Grasshoppers"
FS 2272 "Insects in Spring"

There are thousands of insects. We know the names of over 600,000. There are probably thousands more not yet identified. There are few insects in the oceans, but they are found everywhere in fresh water and on land.

Show:
FS 1486 "Insects That Destroy Plants"

The body of an insect has three parts,- a head, a thorax, and an abdomen. All insects have six legs and a pair of antennae. The majority have a pair of compound eyes and a pair of wings.

Diagram body of insect; label.
Examine insects under microscope or magnifying glass.

Insects eat almost every kind of plant and animal. Their mouth parts equip them for eating different kinds of food. The grasshopper has biting parts; the mosquito has sucking parts.

Directed Reading Activity
Exploring Science, Bk. Five, pp. 6-24

All insects come from eggs. Most of them go through a series of changes. First, the egg hatches into a larva. The larva grows, molts, and after a time, rests. Soon it emerges as an adult.

Draw stages in growth of butterflies.
Directed Reading Activity
ABC Science Series, Gr. 6 pp. 1-31

Among insects we find societies where different insects do different jobs. Wasps, some bees, all ants and termites live in societies. They are called social insects.

Insects harm us, annoy us, and help us. The insects that eat other insects are very helpful to man. Other insects eat our food supply. Termites eat our building materials. Some moths eat our clothing. Mosquitoes and lice feed directly on man. We should encourage the natural enemies of insects. Trees and shrubs in your yard will invite birds to build their nests. They will feed on grasshoppers and other insects nearby. Insect sprays will help control some of our household pests. If man did not wage a constant battle against harmful insects, they would take over the earth.

From studying this unit you should have a better understanding of the living things, large and small, helpful and harmful, that inhabit the earth upon which you live.

Examine a wasp's nest; a bee hive.

Set up an ant colony. Observe.

Show:

"Ants, Bees, and Wasps" FS 2739
"Flies and Mosquitoes" FS 2742
"Bugs and Their Relatives" FS 2740
"Grasshoppers and Their Relatives" FS 2738
"Moths and Butterflies" FS 2741
"Termites and Some Minor Orders of Insects" FS 2744

# WEATHER

I. Understandings

A. Weather and climate are different.
B. Air is a basic element in producing weather.
C. Many instruments have been invented to measure the various components of weather.
D. Man has learned to predict weather with a high degree of accuracy.
E. Weather affects every phase of man's existence.

II. Motivational Activities

A. Daily weather record.
B. Bulletin board display of pictures showing unusual weather conditions.
C. Exhibit of weather instruments.
D. Report-Weather Telecast.
E. Chart-"Dressing for the Weather"

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## Dictionary of Terms (For The Teacher)

**Climate -** the average of weather conditions for a particular area over a long period of time

**Weather -** describes such conditions as rain, snow, wind, etc. as they occur for varying periods of time

**Humidity -** moisture in the air in the form of an invisible gas

**Hygrometer -** an instrument used to measure the relative amount of moisture in the air

**Dew -** condensed moisture on cold objects

**Precipitation -** separation of water from the air falling as rain, snow, etc.

**Clouds -** collection of moisture on tiny dust particles in the air

**Fogs -** clouds resting near the earth's surface

**Atmosphere -** the gases surrounding the earth

**Air Pressure -** the pressure exerted by air against objects due to its weight

**Anemometer -** an instrument used to measure wind speed

**Air Mass -** a volume of air of approximately the same temperature, pressure, and moisture content, usually extends many miles over earth's surface and up to several thousand feet in height

**Barometer -** an instrument which measures changes in atmospheric pressure

**Cirrus -** a feathery cloud, high above the earth

**Cumulus -** a cloud having a rounded or dome-shaped top

**Nimbus -** a storm cloud

Cyclone - counter-clockwise whirling mass of air having a low air pressure at center.

Frost - frozen water vapor

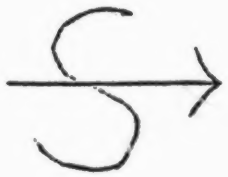
Hail-ice globules built up of ice layers deposited on a frozen raindrop

Lightning -discharge of electricity between two or more clouds or between clouds and objects on the earth

Rainmaking - process of seeding clouds with small particles of dry ice or other chemicals to produce rain.

Thunder - the report following a lightning discharge

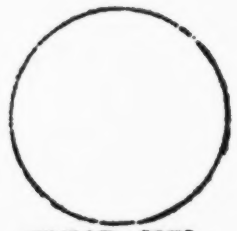
# WEATHER SYMBOLS



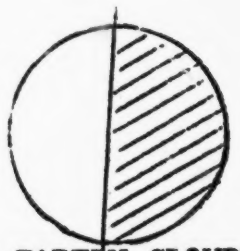
DUST STORM

OCCASIONAL SNOW

CONTINUOUS SNOW



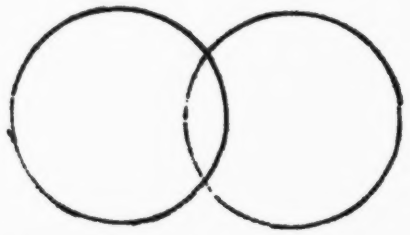
CLEAR SKY



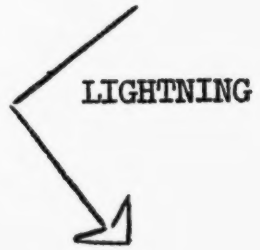
PARTLY CLOUDY

FOG

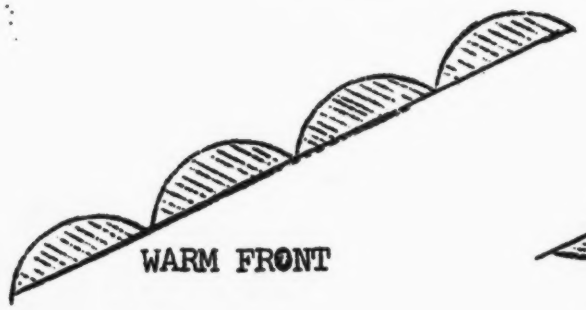
OCCASIONAL RAIN



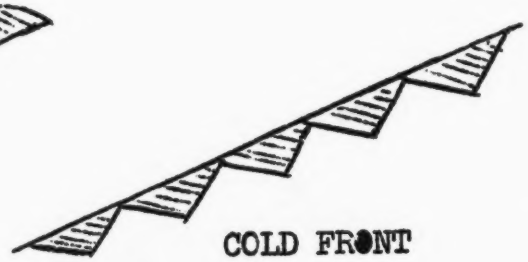
CONTINUOUS RAIN



LIGHTNING



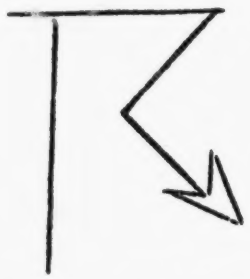
WARM FRONT



COLD FRONT

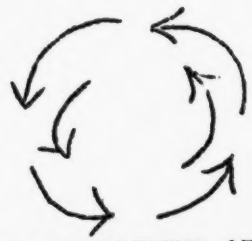
OCCASIONAL DRIZZLE

CONTINOUS DRIZZLE

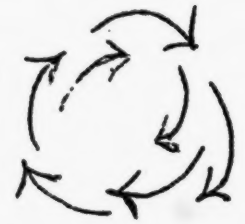


THUNDERSTORM

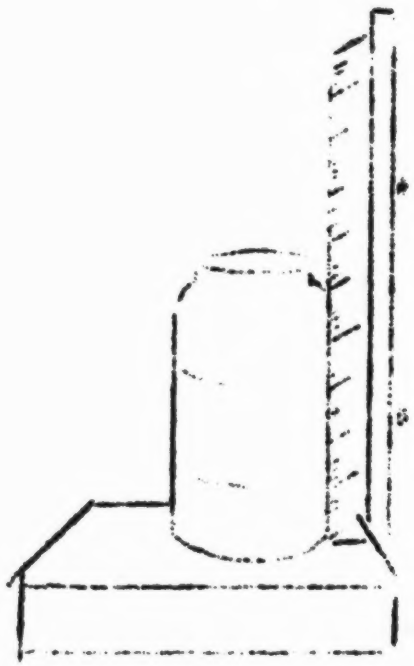
STATIONARY FRONT



LOW PRESSURE AREA



HIGH PRESSURE AREA



## MAKING A RAIN GAUGE

### Materials Needed

A block of wood

A stick

A ruler

Glass jar with wide opening and straight sides

### How to make it

1. Nail a stick upright to one end of the block of wood
2. Nail the ruler to the upright stick
3. Place the jar on the stand near the ruler-secure with a rubber band.

### How to Use It

1. Put gauge outdoors when it rains.
2. Measure inches of rainfall.

## MAKING A WEATHER VANE

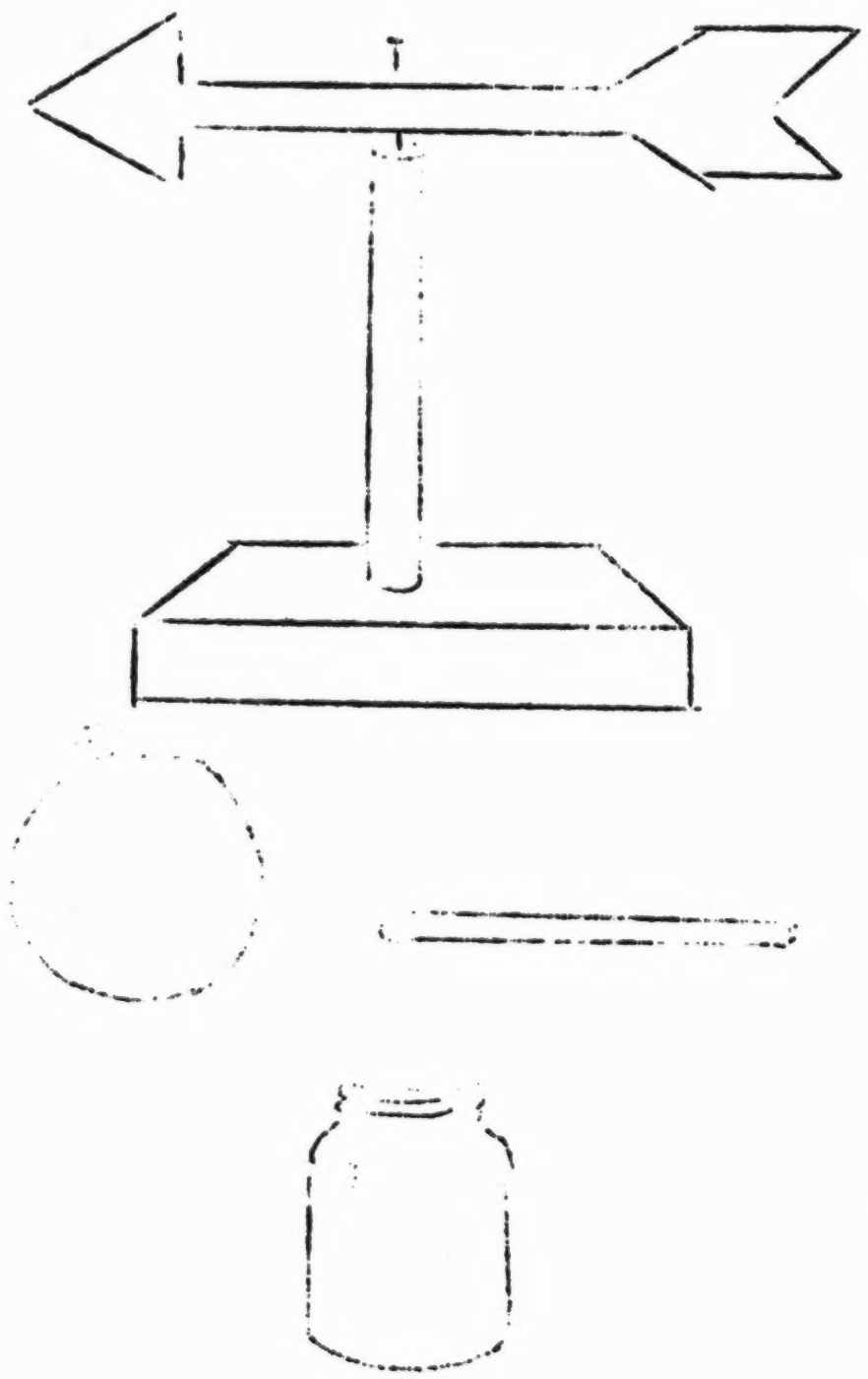
### Materials Needed

An arrow cut from thick cardboard

A block of wood

A dowel

A nail



How to Make It

1. Cut an arrow from the cardboard
2. Fasten the dowel in the center of the wooden block.
3. Stick nail through center of arrow and insert in center of dowel. Do not fasten too tightly.

How to Use It

Place in window sill or outdoors.

Note wind direction

Conclusion

Air moves in different directions

MAKING A SIMPLE BAROMETER

Materials Needed

a balloon s stick a jar



How to Make It

1. Cut a piece out of the balloon.
2. Stretch the balloon over the top of the jar and fasten securely
3. Glue one end of the stick to the top of the balloon.

4. Stand a large piece of cardboard close to the other end of the stick. Be sure the stidk does not touch the cardboard.

How to use:

1. Mark the cardboard at the spot facing the stick.

2. Mark the cardboard at the same time each day.

Conclusion

Air pressure changes

"Everybody talks about the weather, but no one can do anything about it." I am sure you have heard this expression many times. We can do something about the weather now. We can predict what the weather will be with a high degree of accuracy. No longer do we depend upon weather superstitutions such as these:

"Morning rain,
Soon clear again."

"Thunder in the early morning
Is a stormy weather warning

"If a ring around the moon,
Rain is coming soon

"South wind mild, and west wind fair;
Last wind storm, north wind chill air"

"Smoke rising upward in the air
Means the weather will be fair."

Do you know any other weather sayings?

Discuss and illustrate weather characteristics of our climate.

Collect weather reports and maps. Discuss and chart weather daily.

The Weather

| Date | Time | Temp. Out-side | Skies | Humidity | Precipitation |
|---|---|---|---|---|---|

or

The Weather

| Date | |
|---|---|
| Time | |
| Temperature | |
| Humidity | |
| Wind Direction | |
| Clouds | |
| Precipitation | |

Directed Reading:
Exploring Science, Bk. Four, pp. 104-112

Show: Fs 2361-"Thunderstorms"

Directed Reading: New Explaining Why, p. 236-241

When you listen to the weather report what are some of the words the commentator uses to describe weather conditions? (List - temperature, barometer, cold front, low, high, wind, etc.)

Before we discuss these "weather words", let's decide what weather means. Weather describes such conditions as heat, cold, rain, snow, as they may be far a few minutes, hours, days, months or seasons. People often use weather and climate as if they meant the same thing. They do not. Climate is the weather in a given region year after year. If someone asked you what kind of climate Baltimore has, what would you tell them? Can you recall the kind of weather we have in summer, year after year: In Winter? In Spring? In Fall?

Have you ever wondered what makes weather? Air is our chief weather? Air temperature, air pressure, air motion, and air moisture make our weather.

FS 928-"What is Weather?"

Show: FS 929-"What Makes the Weather?"

What do we mean by air temperature?

It is the degree of heat in the air. How is the air warmed? The sun warms the earth; the earth warms the air. The temperature of the air is different in various parts of the earth. There are several reasons for this. Lands near the equator are hot because the sun's rays strike them directly. As we leave the equator, the earth slopes away from the sun's rays and the rays slant more and more as they strike the earth. The more slanting the rays, the less heat they supply. Air near the earth receives more heat from the earth than the air above it. As the air is heated by the earth it expands and rises for six or seven miles above the earth. As air rises it becomes thinner and cooler. By the time it reaches its height, it has become cold and heavy. It begins to settle toward the earth's surface.

Demonstration: Use a globe and a flashlight to show sun's rays striking the earth. Note diffusion where sun strikes with wide slant.

Show: FS 2358 "The Weather Maker"

Demonstration to show expansion of air. Secure a blow-up balloon. Tie it tightly over the neck of a bottle. Heat the bottle slowly. The balloon will become limp.

Air temperature is measured by instruments called thermometers. The one we usually use is a liquid thermometer. It has a glass bulb and a stem. The stem and bulb are nearly full of a liquid that looks like silver. It is called mercury. Sometimes red-colored alcohol is used. The stem is sealed at the top. It broadens to form a bulb at the bottom. Heat causes the liquid to expand and rise in the stem.

The thermometer has a scale for reading. The stem is divided into 180 equal parts; each division is called a degree. When the bulb of a Farenheit thermometer is placed in melting ice, the mercury will drop to $32^{o}$, or freezing point. If it is placed in boiling water, the liquid will rise to $212^{o}$, or the boiling point. Thermometers are used to measure other kinds of heat. Can you tell about one of these?

Take an old thermometer apart and examine.

Keep a daily record of room temperatures.

Use enlarged drawing of thermometer for practice in reading. (Or cardboard model)

Place thermometer in hot water - to note rise of liquid. Place thermometer in cold water to note the fall of liquid.

Show thermometers used for other purposes - candy, meat, sick room.

See ABC Science Series, Bk. 3. for pertinent material to use as a directed reading or research activity.

You have learned that the air gets its heat from the sun-warmed earth and that the winds affect the temperature of the air .. Winds effect our weather in other ways. When they are gentle breezes, they make us comfortable and cool. However, some winds are very dangerous. Ordinary winds move from 3 to 15 miles an hour. When they reach speeds of over 100 miles an hour they are called tornadoes. Tornadoes rise in the shape of a funnel. They pick up everything in their path, trees, houses, automobiles and buildings; These are dropped miles away. Hurricanes are somewhat like tornadoes. They move upward, but at speeds of about 75 miles or more an hour. They cover a broader area than the tornado and originate over water.

A Wind vane is used to tell the direction of the wind. This is a large pole with an arrow on top. The arrow points east-west or north-south. Near the wind vane there is a wind gauge. This looks like a pin-wheel (anemometer). It has four inverted cups on top. The wind blows against the cups and makes them move. As they move, a record of the wind's speed is made.

Identify winds as calm, light, high, brisk, moderate.

Secure Science Kit from Coco Cola Bottling Company. Assemble weather instruments.

Make simple wind vane.

We know now that the warmth of the air and the motion of the air help make our weather. The pressure of air also helps to make weather. Did you know that air has weight? We live at the bottom of an ocean of air (atmosphere) and its weight is pushing down against the earth constantly.

Air pressure is measured by an instrument called a barometer. It records pressure in inches. When the barometer rises, we usually have fair weather. When it falls, a storm may be approaching.

Air moves in great masses. When these masses collide, they form "highs" or "lows" according to the amount of pressure they have. "Highs" usually create fair weather areas; "lows", storms or bad weather areas.

Clouds are often the messengers that announce the arrival of fair or stormy weather. Clouds are formed as a result of the behavior of water. Water is never lost. The heat of the sun causes large amounts of water to evaporate from the surfaces of bodies of water, It goes

Demonstrate pressure of air.
Fill glass with water. Cover with a dampened file card. Invert glass and turn. The cover remains intact because air is exerting pressure on all sides.

Have pupils make a barometer, and record readings.

Obtain weather maps from:

Superintendent of Documents
U. S. Printing Office, Wash., 25 D.C.

Begin a weather booklet to include:

(1) Daily weather record
(2) Experiments
(3) Water cycle chart
(4) Pictures
(5) Current news items

into the air as a vapor. When the air is cooled, the water vapor dondenses on dust or other particles in the air and forms clouds. When water droplets become large enough, they may fall as rain and flow back into some body of water. Here the water will evaporate again and continue the water cycle. Following are some other results of the condensation of water vapor:

dew:- water vapor condensed on a colder object as grass, flowers, automobiles

frost----:--- water vapor changed to a solid state because of temperature of air.

fog - a cloud close to the ground.

sleet - raindrops that have passed through a layer of cold air near the ground

hail - raindrops that have frozen as they rose to high levels of cold air and gathered more water vapor as they descended through lower levels.

snowflakes -water vapor changed directly to ice crystals.

Keep a cloud record

Make a rain gauge. Record inches of rainfall.

Demonstrate to show condensation

Put ice cubes in a glass.

Drops of water on outside come from the outside air cooled by the cold glass.

Directed reading:

New Explaining Why, pp. 231-235

Demonstration: Heat water in a kettle. Hold a cup of cold water near end of spout. Drops of water will form on outside of cup.

Clouds have different shapes. If you watch the clouds, you may be able to tell the kind of weather we are going to have. Here are the names of some clouds, how they look, and what they may mean.

cumulus - large, billowy. Usually indicate fair weather ahead.

stratus - long, flat sheets, usually gray; low -hanging. Usually indicate rain or snow.

Use cotton to make cloud shapes.

Incorporate in a landscape.

Make cloud mobiles.

The rain, snow, hail and sleet that fall, the fog, dew and frost that form prove that there is moisture in the air. The amount of moisture is called humidity. When clothes take a long time to dry and perspiration does not dry on the skin, the humidity is high.

Show F.S. 2360-"Water in Weather"

When moist air rises rapidly to a great height we usually have a thunderstorm. The cold rain, lightning, thunder, and dark, low-hanging clouds in this kind of storm are rather frightening

Lightning is caused by electricity in the air. As the electric discharge passes through the air, it heats the air to a high degree and we see a flash. At the same time the rapid heating of the air causes it to vibrate and set up sound waves that reach the ear. We call the sound thunder.

Lightning may be dangerous, However, when you see the flash, it has done its work and gone. Some places seem to attract lightning more than some others. Barns are struck more often than houses. A tree or a person in an open field is more likely to be struck than a tree or a person in the woods. If you are caught in an open field, you should lie down. The center of a room is probably safer than along its walls. Inside an automobile with a steel body is a safe place. The rubber tires on the automobile make it safe. They act like a lightning rod and "ground" the lightning.

Reading activity:

Exploring Science, Bk.Four, pp. 104-112

Show: FS 2361 -"Thunderstorms"

Directed Reading: New Explaining Why, pp. 236-241

Long ago people depended upon certain signs and superstitions to predict weather. There are two which are still popular. "If it rains on St. Swithin's Day (July 15), it will rain every day for forty days." "If the groundhog sees his shadow on Groundhog's Day, (Feb. 2) there will be six weeks of cold weather."

In 1797, the same year Baltimore Town became Baltimore City, a booklet containing weather predictions and farm information was published in Hagerstown, Maryland. Although its predictions cover expected weather conditions for a year in advance, they are often accurate. Consequently, the "Hagerstown Almanac" is still used by many people.

Today, however, we have a weather bureau in charge of forecasting weather. The United States Weather Bureau, located in Washington, D. C., has set up over 400 weather observation stations and 17 General Forecast Centers. At each weather observation station hours of sunshine, wind speed and direction, rain or snowfall,

Have pupils report on weather superstitions.

Show: Fs 2055-"Trip to a Weather Station"

Show: Fs 2352 -"Weather Folklore"

Directed Reading: New Exploring Why, pp. 221-225

Visit Friendship Airport Forecast Center

Directed Reading: Adventuring in Science, pp. 60-61

air temperature, and relative humidity are noted. Every hour each station sends a report to a General Forecast Center.

The stations and the General Forecast Centers use this information to make a map of the United States with weather conditions written on it.

These are some of the symbols they use:

warm front

cold front

fog

thunderstorm

continuous drizzle

clear

partly cloudy

rain

snow

cloudy

west wind

east wind

The weather forecaster studies the map and predicts weather for the next 12 to 36 hours. Every Tuesday and Friday, the center at Washington makes a 5-day forecast.

Keep a weather chart using appropriate symbols.

Show: Sd 639.1-"How Weather is Forecast"

On the first day of every month a thirty-day forecast is issued. Weather forecasts save millions of dollars each year. Can you tell why this is true?

Men who study the weather are called meteorologists. They hope, in time, to be able to control weather. Already they have had some success in "making weather". In parts of the west where they have long periods of drought, airplanes fly overhead and "seed" the clouds with dry ice. This "seeding" usually causes rainfall.

Weather is important to each of us. It affects our health. Remember winter sniffles, summer sunburn and prickly heat rash? It affects the clothes we wear;-warm woolens for winter and cool cottons for summer. It affects the foods we eat; dishes hot and hearty in winter; salads and "coolers", in summer. It affects the way we spend our leisure,-skiing and sledding in winter; picnicing and swimming in summer. It affects the foods we are able to buy and how much we must pay for them. It affects our safety,-the dangers of skids, falls, and blizzards in winter; drownings,hurricanes and tornadoes, in summer. Remember, weather is the sunshine, the rain,

List various occupations and tell how the weather may affect each. Tell what adaptations are made to cope with weather conditions.

Study the effects of weather on several leading crops.

the snow, the winds, the heat, the cold as they occur in a locality from day to day. Climate is the kind of weather a given locality may have year after year.

# Understanding Electricity

I. Understandings
- A. The world could not function successfully without electricity.
- B. At the present time electricity is one of man's greatest sources of energy.
- C. Man still does not know what electricity really is.
- D. Electricity may be produced in many ways.
- E. Electricity and magnetism are closely related.
- F. Electricity can be both helpful and harmful.
- G. Electricity which man has harnessed for his own use is relatively small compared with the amount of electrical energy available in the universe.
- H. Electric energy can be changed into other forms of energy. (It can produce heat, light, and sound. It can make machinery run.)

II. Motivating Activities
- A. Display of magnets and electrical equipment.
- B. Bulletin board display: newspaper headlines and clippings relative to electricity; pictures of electricity at work.
- C. Films and filmstrips
- D. Exhibit pictures of electrical workers (gas & electric man, lineman, electrician, etc.)
- E. Model of apartment or doll house showing electrical circuits. (use dry cell batteries, door bell, flashlight-bulbs, bell wire)

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Look carefully around the room. Can you see any electricity? No, but it is all around you. It is everywhere. Electricity is like the wind - you can't see it, but you can see what it does.

How many of you become frightened when you see lightning? Lightning is only a spark produced by the electricity that is in the air. Do you remember the story about the man who discovered electricity?

One stormy day in 1752, Benjamin Franklin flew a kite into the air. Tied to the kite was a long cotton string. He placed a metal key on the string and tied a silk thread to the end of it. He thought the electricity would travel through the wet cotton string. He believed the silk thread would protect him from the lightning. When there was a flash of lightning, he noticed the threads of the cotton string spread apart. He thought electricity had moved down the string, but he wanted to make sure. He slowly moved his finger near the key and what do you think happened? Yes, he received a shock. This proved to him that lightning was actually electricity.

Show pictures of Benjamin Franklin experimenting with his kite.

Benjamin Franklin was afraid that lightning might strike tall buildings and cause fires. He discovered a way to protect tall buildings. If you look at this picture of the Shot Tower, a famous Baltimore landmark, you will see what his discovery was. Can you see the metal on top of the building and the wire running down the side? It is called a lightning rod. A lightning rod is a metal pipe. The pipe is attached to a wire that runs down the side of the building and into the ground. When lightning strikes the rod, what do you think happens? Yes, the electric charge runs down the wire and into the ground.

Make a replica of the shot tower using a piece of cardboard. Attach a piece of metal or paper clip to the top. Run a wire down the side of the building.

Did people long ago know much about electricity? No. Many years ago people knew very little about electricity. In order to get heat and light, they had to burn wood. They used horses and oxen to help them do their work.

Make a list of things we use daily that would not be possible without electricity.

Little did they realize that one day an invisible helper would provide man with heat, light, and energy thereby saving time and human energy.

Early scientists began to wonder about some of the strange things that were happening. They could not understand why sparks flashed when they rubbed a piece of silk over a glass tube. They were also surprised when the glass attracted bits of wool. These same strange things happened when they rubbed a comb through their hair. The comb also attracted bits of paper. Sometimes they saw sparks and heard a crackling noise as they combed their hair. They did not know what gave the glass and the comb this amazing pulling power. They did not know where the sparking or pulling power came from. Although they did not know what is was, they called it electricity.

After experimenting further, they learned that there were two kinds of electrical charges. They worked in strange ways. If two things had the same kind of charge, they pushed away from each other. If they had different charges, they pulled toward each other.

Here is a magnet. On one end is an S and on the other an N. Do you know why they are marked? Yes, to show the North and South poles. Every magnet has two kinds of poles usually found near its ends. The poles of the magnet are the places where the push or pull of the magnet is strongest.

Watch carefully as I put these two magnets near each other. What happened? If I turn this magnet over what will happen? Why? Yes, when the two N's or two S's were together they pushed away from each other because they had the same kind of electrical charge. When the N's and the S's were together they pulled toward each other.

Rub a piece of glass with a silk cloth and observe the reaction.

Rub a comb through your hair or on a woolen garment and pick up bits of paper.

Magnets and Electricity
Fs 1595

Display various kinds of magnets.

These magnets can also make other magnets. Does anyone know how it can be done? By rubbing a piece of metal along the side of a magnet you can make a temporary magnet.

Remember when you ran a comb through your hair it picked up bits of paper. The comb became a temporary magnet. The charge of electricity was temporary. Soon it loses its pulling power.

Magnets have the power to attract many things. There are some things they cannot attract. Can you name some?

Today we know more about electricity than our ancestors did. However, many of us still take electricity for granted. If your electrical power fails you will realize just how important it really is. What are some of the things that may happen?

Just think! You would not be able to tell the correct time. All electric clocks would stop. Your radios and television sets would not work. Your telephone would be "dead". The food would spoil in your refrigerator. What would your home be like without the many advantages of electricity?

We know electricity helps us in many ways. Let's list on the board some of the uses of electricity. How does your father use it, your mother, and you?

Electricity provides us with light and heat. It runs motors for the radios, televisions, refrigerators, clocks, freezers, toasters, and many other appliances that we use each day. It also helps us send messages over great distances. It helps us in our modern methods of transportation and communication.

Although electricity is very helpful, it can be very dangerous. Some wires in our homes carry a great deal of electricity; others, carry only a small amount. If you touch an open wire, what will happen? You might get a little shock, a very severe shock, or even a bad burn.

Make temporary magnets using,
- pair of scissors
- nail
- paper clip
- screw driver

Test to see whether objects can be attracted to a magnet: Chart findings.

| Object | Magnetic | Non-magnetic |
|---|---|---|
| chalk | | |
| paper clip | | |
| house key | | |
| rubber band | | |
| thumb tack | | |
| pair of scissors | | |

Electricity Fs 1412

Make a list of the many uses of electricity:

| | |
|---|---|
| heating | drying |
| cooking | lighting |
| cleaning | washing |

Electricity Fs 938

There are two kinds of electricity. We have already studied about one kind. Do you remember when we rubbed the glass rod with a silk cloth? When we rubbed the comb through our hair? What happened? We call this frictional electricity. It is called frictional electricity because friction means rubbing two things together. Sometimes it is called static electricity because it is not moving. It is at rest.

Do you know the other kind of electricity? It is called <u>current electricity</u>. This electricity is man made and does work as it moves. The path along which the electric current travels is called a circuit.

What do we mean by an electric current?

We say the <u>current is on</u> when an electrical path or circuit is complete. When the path is broken, we say the <u>current is off</u>. What helps us to break a circuit? Yes, a switch. It helps us to turn lights and motors on and off. The pushbutton for your doorbell is one kind of switch.

There must be two wires to complete a circuit. Even though a lamp cord is thin it has two wires. One to bring the electricity from the source of supply and the other to take it back.

Electricity may be produced in other ways. Batteries provide us with electricity. How have you used batteries for electric power? (bicycle horn, light, automobile, etc.)

The most commonly used battery is the dry cell battery. Although it produces only a small amount of electricity, it is safe to work with. The dry cell battery is only dry on the outside. Inside it has a mixture of moist chemicals. On the top you can see two binding posts or terminals. One is usually marked with a plus (+) and the other with a minus (-) sign. Wires are fastened to the binding posts to complete the circuit.

List other examples of static electricity.
1) getting out of a car and receiving a shock
2) walking across a woolen rug and reaching for a doorknob or touching someone

List things controlled by switches
flashlight
T.V.
radio
lamps

Examine a piece of insulated wire.

Electricity: How to Make a Circuit Sd 934.1

Display & compare different kinds of batteries:

| | |
|---|---|
| flashlight | transistor |
| dry cell | penlight |

Show a dry cell battery and point out the binding posts.

You can hook up a bell circuit using a bell, a piece of wire, a pushbutton, and a battery. It would be fun to try.

Batteries keep electricity moving through wires in the same way that a pump keeps water moving through a pipe. If there is a break in a pipe, the water will leak out. If there is a break in the circuit, the electricity will escape. This will cause a short or incomplete circuit. Sometimes a bare wire touches another and a short circuit also occurs. This could be very dangerous. It could start a fire in your home. However, there is something in your home that protects you. It is a box that is usually near your gas and electric meter. Who knows what this box is called? (fuse box - circuit breaker)

In the box are small fuses or fustats. These fuses or fustats have a number on them. Some will be 15 amp. and others 20 amp. The larger the number, the more current of electricity it can carry. Inside the fuse, is a soft strip of metal. This metal gets hot very quickly and melts when there is a short circuit or an overloaded circuit. The fuse burns out and breaks the circuit cutting off the electricity before the wires can get too hot to start a fire. It is important to remember that when a fuse blows, it should be replaced only with a fuse having the same number. Do you know why? You must also be careful not to stick your finger or a penny in the opening for the fuse. What will happen if you do?

Earlier we said that electricity passes through wires. It also passes through metal. Anything that electricity can flow through is called a <u>conductor</u> of electricity. The things which do not let electricity flow through are called <u>insulators</u> or non-conductors of electricity. Insulators keep electricity from escaping.

Demonstrate how to hook up a bell circuit.

Make an electric question board.
See: Thurber, <u>Exploring Science</u>, Book 5, pp. 168-171

Add a switch or push button to the circuit to control the electricity.

Electrical Repairs Part I Fs 955
Electrical Repairs Part II Fs 956

Show various kinds of fuses and fustats.
Compare and discuss their uses.

Using Electricity Safely Fs 262

Short circuit a dry cell battery by placing a wire between the binding posts. Have pupils feel the heat in the wire.

Make a list of conductors and non-conductors of electricity.

Can you see why wires must be insulated with rubber or plastic material?

Electric power lines sometimes hang from glass insulators. The wires are made of aluminum or copper because they are very good conductors of electricity. The glass insulators keep the electricity from escaping and running down the pole to the ground. These lines carry the electricity to our homes.

Draw pictures showing several power lines.

Have you ever wondered why a bird can sit on an electric wire and not be burned? This is because the bird is not grounded. He is not touching anything but the wire. If he touched the pole and the wire, he would be burned immediately. If he touched another bird, he would be burned; but, as long as he doesn't come in contact with anything else, he will be safe. This also applies to a person. If a person were hanging on a wire and did not touch the ground, a bridge, a pole or anything else, he would be safe; but, as soon as he grounded himself he would be burned.

We know there is electricity in the air, but did you know that man makes electricity? Much of our electricity comes from falling water. This water turns large water wheels called turbines. The turbines turn machines called generators. These generators take the place of batteries. They produce electric current by moving magnets past loops of wire. Steam engines sometimes turn the generators. These electric generators supply the electricity to light our homes and our neighborhood.

How We Get Our Electricity Fs 863

Some power stations are beside a river. The water is held back by a dam. The stored-up water runs through pipes. It drives water wheels that turn the generators.

Visit a power plant.

You may have seen tall electric towers having thick wires that carry the electric current. These wires connect to other tall towers.

Construct a model power station.
Obtain model from Gas & Electric Co.
Baltimore, City

The current is carried from one tower to another, all across the land. It carries electricity to farms and cities everywhere.

The generators that produce our electricity make use of electromagnets. Have you ever seen an electromagnet? We can make one by wrapping a nail or bar of iron with wire and run an electric current through the wire. This will make the nail or iron bar an electromagnet.

What are some advantages of an electromagnet? It can be turned on and off when necessary. It is stronger than a regular magnet. You have probably seen electromagnets being used in junkyards. They are also used in loading iron on trains.

All of us have electromagnets in our homes. Do you know where? Yes, all motors have electromagnets in them. Let us list on the board some home appliances that have electromagnets.

| | |
|---|---|
| refrigerator | television |
| radio | washing machine |
| clock | toaster, etc. |
| vacuum cleaner | |

A new magnet based on the principle of the electromagnet will someday be used for space walks. The magnet will be placed on the bottom of a spaceman's shoes. He will then be able to walk around in his rocket while speeding through space. The spaceman will be able to turn off the magnet on one foot, take a step, and turn the magnet on again. He will then be able to walk upside down with this new kind of magnet.

Electricity has helped to improve modern methods of communication. Who knows why Samuel Morse is famous? In 1844, Samuel F.B. Morse sent the first message over an electric telegraph that he had invented. He also is famous for having made the Morse Code.

Using a dry cell battery, nail or iron bar, and wire make an electromagnet.
Increase the power of the electromagnet by winding more coils of wire around the nail; add extra dry cell batteries.

| | |
|---|---|
| Electromagnets | Fs 152 |
| Electromagnets | Fs 967 |
| Electromagnets | Sd. 401.1 |
| Electromagnets and How they Work | Fs 2629 |
| Electromagnets: How they Work | Sd. 948.1 |

Have pupils write a simple message using the Morse Code.

Electricity can carry messages thousands of miles in less than a second. The electric wires that are laid across the ocean bed have very thick insulation that keeps them from getting wet. These wires are called cables. Messages that are sent over cables are called cablegrams.

Today because of electricity we have the convenience of telephones, radios, and television. Portable television sets & transistor radios are becoming more popular.

How many of you have transistor radios or portable television sets? It won't be too long before we have a telephone that not only will we be able to talk with our friends, but see them at the same time. Science uses electricity to make all these things possible.

Electricity is a public utility. This means we pay for it as we use it. The amount of electricity we use is recorded by an electric meter. In what part of your home is the gas and electric meter?

Each month the "gas man" comes to your home and reads the meter. Then the gas and electric company sends a bill for the gas and electric that has been used. Have you ever examined the one that comes to your house each month?

Here are some safety rules that we should follow when using electricity.

1. Turn off electrical appliances when they are no longer necessary.
2. Replace worn or frayed electrical cords with new ones.
3. Never use a piece of foil or a penny to replace a fuse.
4. Always replace burned out fuses with fuses of the same amperage.
5. Never stick your finger in an electric circuit.
6. Do not turn on electrical switches while your hands are wet or while standing in the bathtub.

Hook up two telegraph keys and demonstrate method of operation.

Watch Mr. Wizard Sd 143.3

Make a list of job opportunities available because of the electrical industry.

Show gas and electric bill & explain.

Make charts or scrapbook to illustrate the safe use of electricity.

7. Do not overload a circuit.

Buy and use only electrical items that carry the Underwriters Laboratories Label. This is a seal of approval. The laboratories are a non-profit, independent testing institution which accepts or rejects electrical equipment solely on the basis of safety standards.

We have learned many things about a source of energy that we may not fully understand. We should remember that electricity was discovered in the air around us. Since its discovery, man has learned to use it in many ways. It furnishes light and heat for our homes, the means of transmitting sound for radios and sound pictures for your T.V. set. It makes telephone, telegraph and communication possible. It powers many of our home appliances, and enables us to enjoy the many luxuries of modern living.

Display the U.L. seal of approval.

PERSONAL HYGIENE

I. Understandings

A. Regular daily care of the body is one of the most important aids to good health.

B. Care of the body involves a balanced diet, cleanliness, posture, and exercise.

C. Principles of personal hygiene apply chiefly to personal habits of living which include cleanliness of the body, clean clothing, good posture, balanced diet and proper rest and exercise.

II. Motivating Activities

A. Bulletin board display of pictures illustrating personal cleanliness -good posture - outdoor sports.

B. Posters illustrating articles needed for personal cleanliness.

C. Discussion of commercial advertisements on radio and T. V. programs.
(Emphasize those which encourage good health habits.)

D. Film - Body Care and Grooming SD 18.2

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2. Dairy Council of the Upper Chesapeake Bay (charts, pamphlets, etc.)
6600 York Road, Baltimore, Maryland

3. Department of Public Works, City of Baltimore, 1961. "For Your Protection".

4. John Hancock Mutual Life Insurance Company, Health Education Service, 200 Berkeley St.
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PERSONAL HYGIENE

What do we mean by personal hygiene? Hygiene is the science of health. Personal hygiene is concerned with the principles of hygiene applied to our habits of living. These principles have to do mostly with cleanliness of the body, clean clothing, good posture, balanced diet and proper rest and exercise.

To look your best and feel your best you should keep your body clean, sit and stand tall, wear clean clothes and get proper exercise and rest.

How do you care for your body? Let's list some of these ways on the blackboard.

In the United States; the people are able to keep clean easier than most people in many parts of the world. Water supply systems in town and city homes and in many farm and country homes furnish a supply of running water. Easy ways of heating water make running hot water as plentiful as cold.

People spend much time and money keeping clean, therefore, there must be some good reasons for it. Do you know what these are?

Collect pictures or use cut outs to arrange a bulletin board or to make a poster on personal cleanliness.

Check and discuss equipment used for keeping clean in school.
(running water, warm water, liquid soap, powdered soap, paper towels, mirrors)

Everyone who takes a bath or shower feels comfortable and clean. Clean hands and face, neatly brushed hair, and neat, clean clothing not only help make you feel better, but also make. the people think better of you and help win friends. Keeping clean increases the feeling of self-respect and gives greater confidence, pleasure, and satisfaction.

Keeping the Body Clean

The whole body should be washed with soap at least twice a week. Parts of the body that perspire freely, such as the feet and under the arms should be washed with warm water and soap every day. Wash daily, the parts of the body that have to do with the elimination of body wastes.

Do you know what "B.O." stands for? It is body odor caused by bacteria which grow in perspiration or sweat. Washing the skin often helps to keep the pores open so that the perspiration and bacteria may be removed. Bathing often and wearing clean clothes everyday will help prevent body odor.

Make chart

GOOD BATHING HABITS

Take a full bath each night or at least two baths a week.

Bathe everyday in hot weather.

Wash every day all parts of the body that perspire freely.

Use lots of soap and water.

The creases also catch dirt. Sometimes the bacteria in this dirt may make you sick if they are brought into the mouth or nose by dirty hands.

Your skin can keep dirt and disease germs from your body as long as it remains uncut or unbroken. Cuts and wounds in a clean skin are less likely to result in infections.

The pores in the skin from which oil oozes out of at times helps to keep the skin soft. But this oil also catches and holds dirt. The openings of the oil glands sometimes become stopped up with dirt. To get rid of this dirt caught in the oil, you need soap and water. Do you know how soap works? Soapy water mixes with the oil and loosens the dirt.

As you move along in your teens, your glands become more active. This is true of the glands of your skin. These glands are attached to the pits from which hair grows. The overactive oil glands may send so much oil to the surface of your skin that some of the pores become clogged. Then blackheads form. The dark color

Use diagram of the structure of the skin. Label parts and discuss function of each.

of blackheads is not due to dirt, but to a chemical reaction that takes place when the oil clogging the pores is exposed to air. These blackheads may become swollen and inflammed. Sores or pimples containing pus form and a condition known as acne exists.

Do you know how to care for your skin if you have acne or blackheads?

Use a hot pack to soften the skin. (bathtowels or wash cloths soaked in hot water and held against the skin for 20 or 30 minutes). Wash the affected areas with soap and hot water two or three times a day. Dry the skin with a rough towel.

To prevent infection, do not pick at the face or other affected parts. Be sure to use your own towel and washcloth.

Emotional changes as well as physical changes during the teens play a part in acne. Pimples often appear at a time of excitement or stress - at a party, on a date, or during an examination.

Filmstrip:

Your Skin and Its Care Fs-986

There is no short cut to the cure of acne. A doctor who is a specialist in skin disorders can give the quickest and surest help. (We call him a dermatologist)

Acne may occur on the face, neck, shoulders, chest and back where the oil glands are plentiful. The scalp too, has a large supply of oil glands which-if they become overactive - can cause dandruff, a condition closely related to acne. What is dandruff? Do you know what causes it? What do you think you could do to get rid of it?

In order to know what it is you need to know about the structure of the skin. For each hair of the scalp there are one or more oil glands. When these oil glands become too active - as they do in acne- there is an oiliness of the scalp. Because of the hair, it is harder for this oil to be removed from the scalp than it is from the face or neck or shoulders. Therefore, the oil remains on the scalp and dries.

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This dry coating affects the surface cells of the scalp. These surface cells are shed as dead cells. The dead cells mix with the dried oil and form flakes. It is these flakes that are known as dandruff.

Most people think of dandruff as being caused by a dry scalp. As you know it is caused by an oily scalp. Dandruff is not "catching" as most newspapers and other advertisements would have you believe.

Now that you know what dandruff is and what causes it, how do you think you can try to avoid having it.

What should you do if you do have it?

Care of specific parts of the body.

Care of the Hair - How do you care for your hair? Do you use your own comb? Why should you care for your hair?

The hair grows from roots in the inner layer of the skin. The hair gives the top of the head protection from blows, extremes of heat and cold. The condition of the hair should be the concern of everyone. It should be kept clean, neat, and well trimmed.

Comb and brush the hair each morning when you get up and throughout the day as needed. A good brushing helps remove dust and dead particles of skin and helps to spread the natural oil over the hair to keep it glossy and neat. Use your own brush and comb. Wash them in warm water & soap to keep them clean.

Your hair should be cut, or trimmed often enough to keep it attractive. Even though hair styles change often, neat, clean, good looking hair is always in style. Washing the hair once a week for boys and girls is a rule. Many people follow it with good results. Avoid getting too close to people with unclean heads. It is easy to get vermin, or lice, in the hair.

One way to get rid of head lice is to moisten the hair with kerosene or with larkspur purchased at a drugstore.

Tie a clean scarf or towel over the hair for several hours or overnight. Wash the hair with hot vinegar to loosen the nits or eggs that cling tightly to the hair. Comb the hair with a fine toothed comb, then wash the hair thoroughly with warm water and soap.

Plan a bulletin board display - mount items needed to keep the hair clean.

Filmstrip:

Personal Appearance Fs 1699

## Clean Hands

Hands should be washed more often than other parts of your body because they are used for so many things. Clean hands look better, have fewer germs on them, and help keep the things you touch cleaner, too; such as your food, books, papers, walls, and woodwork.

Plan to record daily cleanliness inspection of pupils on chart.

Hands should be washed before meals; after going to the toilet; before going to bed, before going to school or any place where you expect to look especially clean and neat.

Film: How Billy Keeps Clean Sd.507.1

## Keep Nails Celan and Neat

The fingernails and toenails are parts of the outer layer of skin which have grown hard and tough. They give protection to the ends of the fingers and toes.

Demonstrate proper ways to care for the hair and fingernails.

## Care of the Fingernails

The best time to clean your fingernails is after you have washed your hands. Brush the ends of the nails in warm, soapy water with a small nailbrush.

Plan inspection of hands and fingernails of the class.

Use orangewood stick or the blunt end of a nail file to clean the nails. The nails should be trimmed from time to time to keep them the right length to be of greatest use. The nails should be cut so that they are the same shape as the rounded ends of the fingers. Biting the fingernails makes ugly,tender, painful finger tips.

Care of the Toenails

Cut and clean your toenails right after a bath when the nails and the skin around them are soft never cut the toenails too short at the corners. Cut the toenails straight across.This will help in preventing ingrown nails.

Bad Breath

Many boys and girls have bad breath, or halitosis. Healthy persons seldom have bad breath. Sometimes bad breath is caused by eating strong-smelling foods such as onions and garlic. These foods contain (aromatic) substances that are absorbed into the blood and are given off from the lungs in breathing. Bad breath may

Chart names of some popular items used to correct bad breath.

Have pupils collect newspaper and magazine advertisements of mouthwashes, gargles, and dentifrices. Discuss their use.

be caused by nose and throat infections, decaying teeth, diseased gums, and digestive disturbances. If you feel that your breath is not pleasant, you should see your doctor and dentist who will be able to tell you the cause of the trouble. Sometimes mouthwashes, gargles or dentifrices may correct the source of trouble. Other times this is not the way to solve the problem.

Care of the teeth

Dentists say that the most important time to brush your teeth is right after eating. They know that teeth decay is started by the presence of food, especially sugars and starches, in the mouth. Bits of food left in the mouth are rapidly changed into acid by bacteria present there. This acid nicks away on the hard enamel outer covering of the teeth.

To prevent this, the teeth should be brushed after every meal -if this is not possible the mouth should be rinsed with water.

Filmstrip

Brush Up On Your Teeth Fs 1603

Plan an assembly program. Invite the school nurse and a dentist to be guest speakers.

Film:

Teeth Are To Keep Sd. 420.1

Save These Teeth Sd. 331.1

Dental Health: How and Why Sd. 344.1

Brushing the teeth properly is only one step in the care of the teeth. Be moderate in the use of sweets. Choose fruit for between-meal snacks and substitute fruit for sweet desserts. See the dentist for regular check-ups. A wholesome, well balanced diet promotes the health of the gums and the mouth tissues.

Small cavities should be filled before decay spreads to the inner parts of the teeth.

Sometimes the dentist paints the teeth with a weak solution of the chemical sodium flouride to prevent tooth decay. Most dentist use X-ray pictures to examine the teeth. An X-ray picture shows the whole tooth, including the hidden roots, cavities, and other troubles that cannot be seen by the eyes alone.

Most dentists look for any signs of early gum trouble and for irregularities that may need correcting.

A dentist who specializes in straightening irregular teeth is called an orthodontist.

Make a chart listing steps in care of the teeth.

Film:

Teeth: Their Structure and Care

Sd. 802.1

Baltimore Plan, The - Sd. 290.2

Have pupils draw or label a diagram of a tooth.

Label a diagram of a tooth showing progress of tooth decay.

Straightening teeth usually takes a long time but can do a great deal toward improving a person's appearance as well as his dental health. It is often a necessary health measure. If teeth do not meet properly it is not possible to chew food well and as a result one may have poor digestion. Poor bite leads to gum disease and tooth decay since crooked teeth are hard to clean.

Filmstripp:

Your Teeth and Their Care Fs 982

## Care of Clothing

Clothing is used to cover, beautify, and protect the body. Clothing should be suited to what you wish to do. There is clothing for play and games, work, school, dress, and parties. Clothing should be suited to the weather and the season of the year.

Play and work clothing should be made of strong materials. Work clothes are usually stronger and cheaper than dress-up clothes. These clothes may be changed after the work is finished. People sometimes work in clothing that they no longer use for dress.

Display pictures showing proper dress for various kinds of activities and weather.

Film:

Clothes and You:: Line and Proportion Sd. 686.1

Loose, comfortable clothing does not interfere with breathing and circulation of the blood. Tight clothing that presses upon the chest or is tight around the waist or arms or legs can interfere with the proper circulation of the blood in the blood vessels. Whenever possible, the weight of clothes should be supported from your shoulders rather than be held by tight bands or belts.

Film: Clothes and You:

Line and Proportion Sd. 686.1

## Clothing to Suit the Weather

Clothing that suits the weather helps protect the health. The purpose of warmer clothing in winter is to prevent the body heat from being lost rapidly. A good material for winter wear is wool. Wool keeps in the body heat. Extra clothing should be taken off when you are indoors. Overheating the body indoors and too little protection from cold outdoors can lessen resistance to colds and sicknesses.

Cotton, linen, or other light materials are suitable for summer wear. These materials allow the heat of the body to pass through them more rapidly

Collect samples of different materials used to make clothing.

Discuss and display items used in cleaning clothing made from the various kinds of materials.

than through wool.

When it rains, a raincoat, rubbers or galoshes should be worn to keep the clothing and body dry. They are airproof as well as waterproof and prevent the perspiration from evaporating. This is why your skin-and your clothes are damp when these are not removed when going indoors.

Wet clothing should be changed to dry clothing as soon as possible. Body heat passes faster through wet clothing than through dry clothing. A rapid chilling of the body may cause colds. After playing a lively game outdoors, in cool weather an outer wrap should be worn.

Clothing kept clean and neatly pressed will last longer. Clothing hung up will last longer. Clothing hung up will stay cleaner and neater longer.

Underwear, socks, and stocking should be washed every night. It makes them feel nicer to wear and also helps them last longer. Clean underclothing should be put on after a bath. A clean

Discuss and list ways of caring for clothing:

Filmstrip:

Proper Clothing and Their Care
Fs 2190

body should have clean clothes. Mending worn or torn clothes makes them last longer. They may be worn with pride if they are kept clean and neat.

Good Posture and Your Appearance

The body may be straight and erect because of proper standing, walking and sitting postures. The muscles of the body will be strong and well developed from plenty of exercise in the fresh air and sunshine.

Weak muscles are one of the causes of poor posture. When you have good posture, the chest is held up and the shoulders are held back so that breathing is made easier and the body is able to have the fresh air to give it the oxygen it needs.

When you have correct posture, the stomach and other organs of digestion are not crowded and are better able to do their work. Digestion is carried on more easily, the blood is allowed to circulate more freely in order to reach all parts of the body.

Poor posture may force bones out of their proper positions. When this happens, the muscles attached to these bones will be weakened.

Collect and cut pictures from newspaper, and old magazines that show good form in games and sports. Make class or individual scrapbooks.

Plan a posture contest. Select a committee to make the rules for good posture. Use members of the class as the contestants.

Choose judges-post names -photos, etc. of the winners on the bulletin board.

Make a chart, list times when good posture is important(applying for a job- any activity done before an audience)

The body may have many different positions.

A good walking posture: Hold chest up, shoulders back and strike the ground lightly with the heels. Point toes forward and support weight on the balls of the feet. Walk freely and naturally, taking steps neither too long nor too short.

Running posture: Run slowly, with arms hanging loosely at the side and swinging just a little. If running a race, run on the toes and clench the fists. This position helps you run faster.

Sitting posture: Sit in a seat with the body erect. Place feet on the floor, toes pointing forward. Sit well back in the chair with the weight of the body resting upon the upper part of the legs. Do not cross the legs. This will cause poor circulation of the blood.

Sleeping posture: Lie in a comfortable position. Some people prefer the left side. It does not matter which side you lie on as long as you are comfortable.

Demonstrate different positions one may have for correct posture.

Make a chart

Have pupils make slogans for good posture. Select the best ones and print on posters. Display on bulletin board.

Have pupils make silhouette pictures illustrating good posture in different positions. Use for bulletin board display.

Have pupils make stick figures to show good posture.

Most people change positions often during the night without knowing it. The best sign of good health is to sleep soundly.

Wear comfortable shoes that fit well. It is impossible to walk well with shoes that hurt your feet. Keep the heels even. Shoes worn down at the heel put extra strain on the muscles of your legs.

Wear clothing that fits well. Clothing that is too heavy will tire you and cause your shoulders to droop. Tight clothes can prevent you from holding your shoulders back and from standing straight and tall.

Sleep on a bed that is long enough so that you may stretch out on it. Use a mattress soft enough to allow for the curves of the body, but not too soft.

Don't worry about things you cannot help. Worry helps cause poor digestion, rest, and sleep. These affect the posture and appearance.

Many boys and girls with poor posture are tired. Be sure to get the rest and sleep your body needs.

**Filmstrip:**

Posture Fs 2382

Have physical defects corrected so that they will not affect the posture of the body. Poor hearing and poor eyesight are sometimes caused by poor posture.

Diseased tonsils and enlarged adenoids affect the health of the body and may cause poor posture. Weak arches of the feet are harmful to posture. If these defects are corrected this will help improve posture as well as health.

Discuss ways of having physical defects corrected.

Have school nurse visit the class and talk about the services of the Health Department Clinics.

People who have good posture do not tire essily because there is no strain on the muscles of the body. Good posture makes it possible for you to move about easily and comfortably.

Exercise

Exercise may be gotten through play or work. Exercise makes muscles grow large and strong. The play period after lunch or your gym period helps give you the exercise you need to relieve the tired

List on chart names of games that exercise the "big" muscles of the body.

feeling that comes from sitting too long.

Most young people get their exercise through play. Games that require much running, jumping, and chasing exercise the big muscles in the arms, legs,and shoulders. These exercises not only strengthen the muscles, but they are played outdoors in the fresh air and sunshine which give them added value.

Can you tell ways in which you get exercise?

Walking is a valuable exercise which most of us can do with little effort. Walking to and from school, stores, taking hikes, and taking walks with friends make the exercise enjoyable. It gives you an opportunity to be outdoors and get plenty of fresh air.

Swimming and skating also bring the big muscles of the body into action. Many sports provide good exercise for the muscles. Baseball, dodgeball, volley ball, captain ball, and basketball call for skill in handling a ball and quick body movements in running, jumping, and dodging.

Display pictures of sports

Indoor-Outdoor (Seasonal)

Keep a record of games played during physical education periods- at home - alone - with others, etc.

These games provide plenty of exercise.

Work is Good Exercise

There are many kinds of useful work that provide exercise. Running errands, cutting grass, cleaning the cellar, sweeping the walks and car washing are some home chores that give good exercise. There are many useful things to be done around the home. By doing your share of these, you help yourself to better health.

Everything you do gives exercise to certain muscles in the body. Exercise does the most good when you form the habit of playing out of doors in the fresh air and sunshine.

Visit a recreation center.

Rest and Sleep

What time did you go to bed last night? What time did you awaken this morning?

Discuss and list answer to questions pertaining to hours of sleep and rest on the blackboard. Evaluate.
Film: Rest and Health Sd.231.1 208.

Feeling tired is natural after exercising at play or work. It is a signal to rest. People can rest while listening to the radio, talking to friends or by sitting quietly. The body feels refreshed after resting and you have a new supply of energy for more activity at work or play.

Sleep is the best form of rest.

The body uses less energy as you sleep. Breathing is slower and the heart beats slower. Waste materials are removed from the muscles by the blood as it circulates around your body. After a good night's sleep, the body has a new supply of energy. Sleep is one of the most important needs of the body. A person must sleep to keep alive. Practice these good sleeping habits:

Be quiet for a time before going to bed. Relax and avoid exciting things which will keep you awake. Do not eat just before going to bed. Have good ventilation in the room where

Filmstrip:

Sleep and Rest Fs. 990

Film:

Rest That Builds Good Health
Sd. 578.1

Plan and chart class activities for a day-list only those contributing to Good Health Habits

Draw pictures to show good health practices.

you sleep. Remove all clothing worn during the day and place it where it will air. Night clothes should also be aired. Take a bath if possible. Sleep in a dark, quiet room. Cover the body with enough bed clothes to be warm and comfortable. Sleep alone if possible. Go to bed early and about the same time each night so that you fall asleep quickly. Remember by going to the toilet before going to bed, your sleep will not be interrupted by getting up during the night.

A good nights sleep improves your work and your disposition. You will be happier and more cheerful if you get enough sleep. We have talked about many things that pertain to personal hygiene. Can you name some of these things? Many are necessary for good health, as well as for good personal appearance most of these things depend upon forming good health habits. What are habits? They are the many things we do without having to think about them.

Keeping a healthy body is a responsibility each of you must assume if you want to look your best, feel your best and live a happy life.

UNIT: Health & Safety in Home, School and Community

I. Understanding

A. Health and safety are basic to a happy life.

B. Individuals can play a major role in promoting health and safety for themselves and others.

C. There is specific information which will help individuals in leading safer, healthier lives.

D. Education concerning the health and safety of ourselves and others should be a major part of our training.

E. There are community agencies that will offer help, guidance and services in matters relating to health, and safety.

II. Motivating Activities

A. Show health and safety posters and discuss them.

B. Read clippings from newspapers and magazines and discuss how attention to safety rules might have kept accidents from happening.

C. Have pupils list health measures their families have taken to protect them.

D. List safety measures taken in the school.

E. Have class make a bulletin board showing various safety and health habits.

III. References and Audio-Visual Aids

| | |
|---|---|
| P-Girl Scout Handbook | Girl Scouts of America |
| P-Boy Scout Handbook | Boy Scouts of America |
| P-Andress; Goldberger etc. | Safety Everyday Ginn & Co. |
| P-Macmillan Life Series | Bk. 1-4 Macmillan |
| T-Macmillan Life Series | Bk. 5-6 Macmillan |

See Book Catalogue #11 for additional references.

Audio Visual Aids

| | | |
|---|---|---|
| 1. | The House Fly | 3d-120.1 |
| 2. | The House Fly and Its Relatives | Fs-1484 |
| 3. | Safety in Summer | Fs-590 |
| 4. | Vacation in the City | Fs-391 |
| 5. | We Visit the Seashore | Sd-288.1 |
| 6. | Body Care and Grooming | Sd-18.2 |
| 7. | Body Care and Grooming | Fs-317 |
| 8. | Brush Up on Your Teeth | Fs-1603 |

| | | |
|---|---|---|
| 9. | Sleep and Rest | Fs-990 |
| 10. | Your Teeth and Their Care | Fs-982 |
| 11. | Improving Your Posture | Fs-1854 |
| 12. | Teeth: Their Structure | Sd-802.1 |
| 13. | Teeth Are to Keep | Sd-420.1 |

Health and Safety in the Home

"A man's home is his castle . Have you ever heard this said? What do you think it means? A real castle? Well it simply means that a man's home, whether it be a mansion, a fine house, a small house, a hovel, a fine apartment, a comfortable apartment, or one room, belongs to him and his family. It is his privilege to close the door and keep the world out if he choses, unless the law has a search warrant to enter his 'castle'.

"Your home is your castle. It s hould mean happiness, comfort and safety to you. We studied about family happiness in our last unit therefore,

in this unit we shall learn ways in which we can help make our home comfortable and safe.

Did you ever hear that a great number of the accidents that happen to people occur in the home? This is true, there were over 4,000,000 home accidents during a recent year, and about 28,000 resulted in the death of the individuals. Can you give me one reason why this is so? Yes, for one thing people are in their homes more than in any other one place.

Can you mention some types of accidents that happen in the home?

falls cuts poisoning

burns bruises

What do you think this saying means?

'Accidents don't just happen, they are caused.'

Yes, for every home accident there is a cause and very often the cause is just plain carelessness.

Make posters-showing some of the common home accidents. Use illustrations from old magazines. Write a sentence telling who might have caused the accident.

Let us mention some home accidents that have happened to us or our family or friends and see if we can discover how they might have been avoided. Here are some examples:

List accidents on board. Write statement as to how they could have been avoided.

Falls-What could happen? How could it have been avoided?

Mother used chair to hang curtains.

Brother climbed on stool to put new bulb in light.

Sister went down cellar steps without turning on cellar light.

Father left ice on front steps.

Little brother left skate in doorway.

Mother put thick wax polish on living room floor.

Brother left wagon on sidewalk.

Draw pictures showing how carelessness causes accidents.

Burns

Mother let baby play in kitchen.

Pot holders were worn thin.

Brother turned on radio with wet hands.

Father smoked in bed.

Matches left where children could get them.

Pans and skillets left on stove with handles extended.

Cellar filled with paper and trash.

Sister used match to find something in her cupboard.

Mother poured hot grease in a glass jar.

Sister tried to lift a bucket of boiling water off the stove.

Draw pictures showing
Right Way and Wrong Way
of performing household tasks.

Cuts

Brother sharpened a pencil with a razor blade.

Mother hurried as she peeled potatoes.

Father used a dull razor.

Little brother tried to close a pen knife.

Little sister used pointed scissors to cut out paper dolls.

Mother put knives and forks backwards in the drawer.

Bruises

Mother changed the furniture.

Bill left the door ajar to the bath room.

Too much furniture was crowded into one bedroom.

Poisoning

Insecticides left where small child can get to them.

Poisons left unlabeled on medicine shelf.

Brother took medicine during night without putting on light.

Show empty bottles and cans containing harmful substances.

After discussing and studying about these accidents who can now tell me what he thinks this statement means?

"Accidents Don't Just Happen".

We are all agreed that we can make our homes safer, now let's see what we can do about making them healthier. What would be the first thing you would say?

Cut out pictures from old magazines showing tools we need to keep our houses clean.

Keep your home clean. Yes! Wash, dust, scrub, mop, and use the sweeper or the vacuum cleaner. Clean the beds, clean the kitchen utensils, clean the bathroom, clean the cellar, and clean the bed rooms.

Cut out pictures from old magazines showing tools we need to keep our houses clean.

Can you name some PESTS that may get into your home?

ants roaches bedbugs moths mosquitoes

lice mice rats flies silver fish

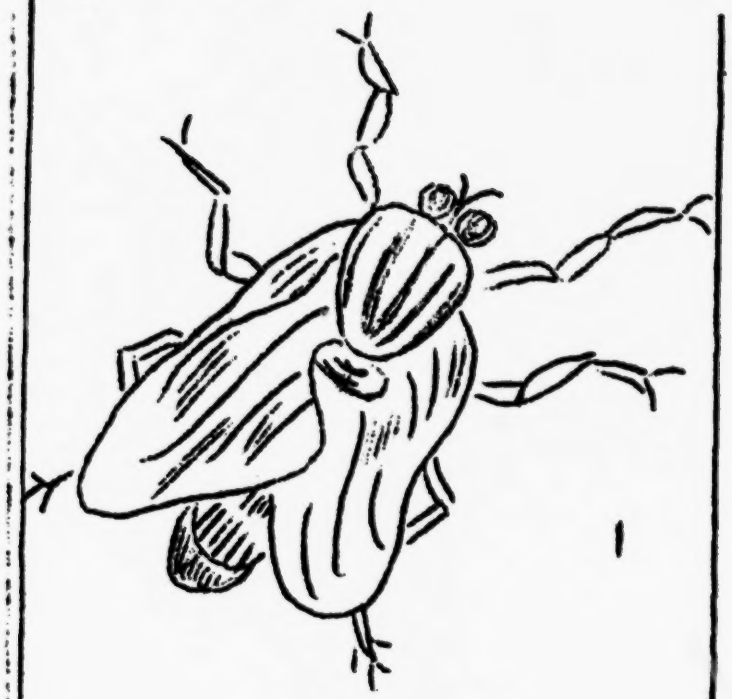
How can we get rid of these pests?

Draw pictures of several household pests. Tell how you can prevent each of them from inhabiting your house. Tell how you can get rid of them in your home.

First of all cleanliness will prevent many of them from inhabiting your home.

Screens will keep out flies and mosquitoes. A good insect spray and a fly swatter will help kill those that do get in through the opening and closing of doors. Getting rid of any pools of water in old cans or jars in or out of the house will keep them from breeding. Keeping a clean garbage can with a snug fitting top will keep flies away. Taking up the dog's or cat's uneaten food will keep ants and flies from being attracted to it.

Write an experience story about how Joe and Mary helped father and mother get rid of flies and mosquitoes.



1. HOUSEFLY
Line Shows Actual Size

2. MOSQUITO
Lines Shows Actual Size

3. TERMITE
Line Shows Actual Size

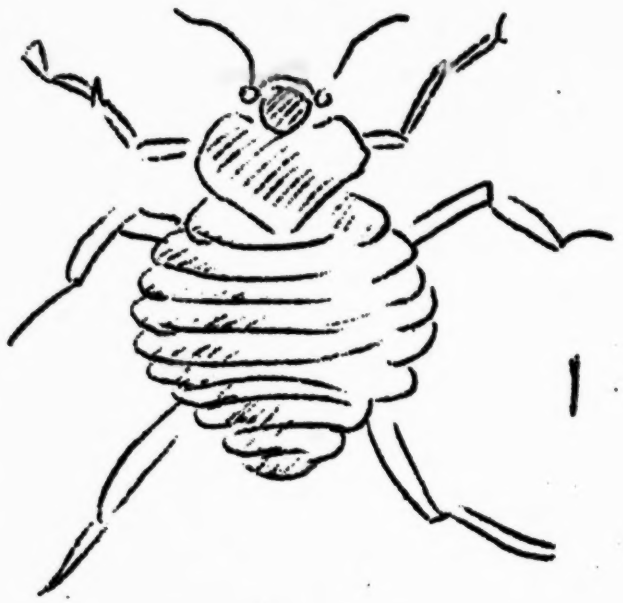
4. RAT

Smaller Than Life Size

5. ANT

Line Shows Actual Size

6. BED BUG



Line Shows Actual Size

Roaches like dampness. Air out your cellar and keep it clean. Mice and rats inhabit old wood piles, newspaper piles and holes in the cement. Set traps and use poison but <u>do not</u> use a type which is lethal to humans or your dog or cat. Do not leave food scraps or uncovered garbage cans in your house, yard, or on the street.

Bed bugs get into old wooden frames of houses or beds. Clean <u>thoroughly</u> and buy a spray to fight those already there.

Air garments frequently and spray or use moth balls for your woolens during the summer. This will prevent moths from eating your clothes.

Silver fish thrive in old papers and dampness. Again, keep things clean, dry and aired and you can be rid of most household pests.

What <u>one word</u> is used most frequently in talking about how to be rid of household pests?

CLEANLINESS !!!!!!!

Teacher: Read story of "Yellow Fever Carrier" - Mosquito.

Demonstrate use of spray gun and insecticides.

HEALTH AND SAFETY IN THE SCHOOL

When a large number of people are together as they are in school, they must observe some health and safety rules which may not be of as great importance in the home. Can anyone think of some of these rules?

| | |
|---|---|
| HALLS | Always walk, not run in the halls.<br>Always keep to the right. |
| DRINKING FOUNTAIN | Don't crowd and push at the drinking fountains.<br>Take turns at the drinking fountain.<br>Don't put chewing gum or paper in the drinking fountain.<br>Don't spit water back into drinking fountain.<br>Don't put mouth on the metal bubbler. |
| LAVATORIES | Keep them clean and neat.<br>Take turns - don't push and shove |

Draw health and safety posters illustrating some safety rules for: Halls
Drinking fountains
Playground etc.

| | | |
|---|---|---|
| | Wash hands after using lavatory. | |
| | Don't mark on walls. | |
| THE PLAYGROUND | Take turns in using equipment. | Tell what might happen if each rule is broken. |
| | Do not push and shove. | Role play: Good and bad playground habits. |
| | Don't chase a ball into the street; wait for the teacher to see whether or not it is safe to get it. | |
| | If there is an accident get a teacher immediately. | |
| | Dress for the weather. | Get an "observation" committee. Let them report on good and bad practices seen on playground. |
| | Keep playground clean and free from nails, glass and other objects which could cause injury. | |
| THE GYMNASIUM | Don't use equipment unless teacher is present. | Invite physical education teacher to speak to class on "Safety in the Gym." |
| | Wear the type of shoes and uniform required. | |
| | Take turns, do not push and shove. | |
| | Leave eye glasses in locker if possible. | |
| | Obey rules of all games. | |
| | Don't keep sharp objects in pockets when playing games. | |

IN THE CLASSROOM

Don't pile books in aisles.

Girls - Don't put pocket books in aisles.

Don't push and shove in line.

Don't sit facing direct sunlight.

Don't use desks that are too large or too small.

Use eye glasses at all times if you are supposed to wear them.

Use hearing aid at all times if you are supposed to wear one.

Cover your cough and sneezes.

Keep your feet under your own desk.

Obey fire and air raid drill rules and regulations.

Do not lean out of windows.

Do not run in or out of open doors.

Ask to see the school nurse when you are ill.

Never touch electrical devices without teachers permission.

Do not raise or lower windows without teacher permission.

Tell accidents which might result if these safety rules are broken.

HE LTH AND SAFETY IN THE COMMUNITY

On Streets & Buses

Walk on the sidewalk.

Stay to the right.

Cross only at corners and with the green light or walk sign.

Wait on sidewalk until bus stops.

Do not push and shove in getting on or off buses.

Never cross in front of public bus after getting off.

If you cannot get a seat on bus, be sure you hold to rod or seat.

When walking on a highway at night where there are no sidewalks, be sure to wear a light colored dress, coat or jacket and walk facing traffic.

BICYCLE SAFETY

Be sure your bicycle is not too large for you.

Check your bike for mechanical defects- especially brakes.

Be sure the bell or horn works.

In traffic keep to right near curb.

Don't weave in and out of traffic.

Obey the traffic signals.

At a dangerous and busy intersection it may be wise to <u>walk</u> your bike across the street.

Don't turn in the middle of the block.

Don't try to "show off" when riding your bike.

Show film or filmstrip on "Bicycle Safety"

Discuss type of bicycle accidents and the probable causes.

Take class to school yard and have boys demonstrate good bicycle safety.

PUBLIC PLACES

Never push and shove in a crowd.

Obey signs in pub lic buildings.

Obey directions of policemen and other officials at games and public events.

Don't take your younger brothers and sisters in large crowds.

Draw signs seen in public places.

Stay in your seat when attending an event-

except at intermission-then <u>walk</u>, do not

run, to the place you are going.

Don't take pets in crowded places.

Keep pets on a lease at all times if you

take them along busy streets.

Stay away from crowds gathered around an accident.

If you get lost go to nearest officer or policeman.

<u>Never</u> push fast on a revolving door.

Don't play on escalators.

Walk, don't run up or down steps in stores.

Do not play with food market carts, inside or

outside stores.

I am sure you can name many more health and safety rules for home, school and community. The boy or girl who has good habits of safety and health will have a better chance of avoiding accidents than the boy or girl who doesn't know and doesn't care about such habits.

Draw signs seen in public places.

Discuss how a pet might cause an accident to itself or to others.

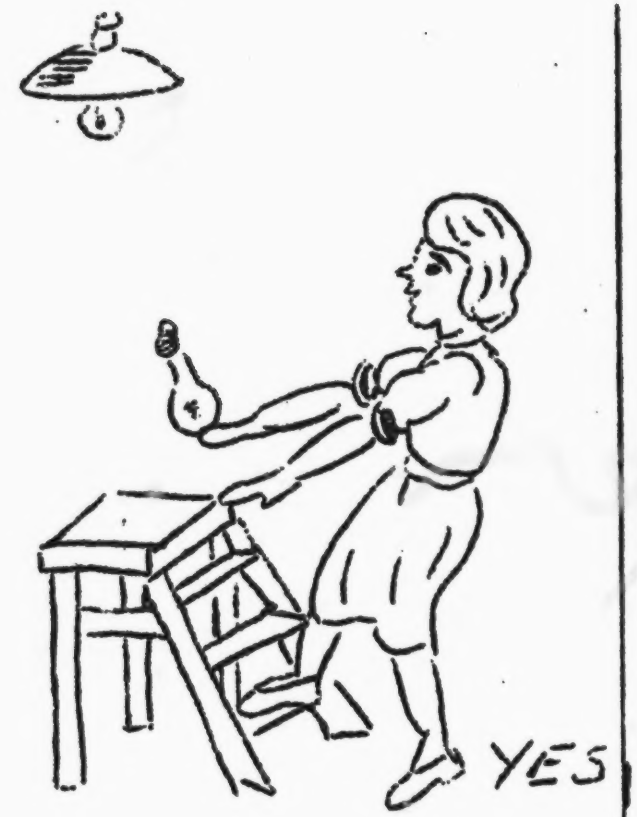
Tell what accidents can happen in a revolving door.

Discuss cost of carts and how constant repair and replacement can cause added cost to market products.

Make a scrap book of good health and safety habits. Illustrate with pictures from old magazines or draw your own illustrations.
Write under each picture the health or safety rule that it represents.

NO

NO



YES

YES

NO

NO